

APPENDIX A

UST SITE CLOSURE DOCUMENTATION AND TANK CLOSURE SUMMARIES



Alan C. Lloyd Ph.D.
Agency Secretary for
Environmental Protection

California Regional Water Quality Control Board

Colorado River Basin Region

Internet Address: <http://www.swrcb.ca.gov/~rwqcb7>
73-720 Fred Waring Drive, Suite 100, Palm Desert, California 92260
Phone (760) 346-7491 · FAX (760) 341-6820



**Arnold
Schwarzenegger**
Governor

June 29, 2005

Mr. Robert Fischer, Code 45RF
1605 Third Street, Bldg. 504
Naval Air Facility
El Centro, CA 92243-5001

RE: REPORT OF SITE ASSESSMENT ACTIVITIES AT 19 UNDERGROUND STORAGE TANK (UST) SITES, NAVAL AIR FACILITY, EL CENTRO, CALIFORNIA.

The Regional Water Quality Control Board, Colorado River Basin Region, received the above referenced report on December 1, 2004. The purpose of this report was to document and present the results of site assessment at the 19 UST sites, all of which required further work in order to fill data gaps due to incomplete assessment or incomplete remediation. Board staff has finished its review of the individual site assessments. Signed closure summaries were sent to the Navy on June 1, 2005, for sites that required no further investigation or other action. With regard to the remaining UST sites, Board staff has the following comments:

1. **UST 114:** Board staff concurs with the conclusion and recommendations as presented in the summary report. It states, "It is the opinion of PWCSO that further assessment may be conducted to further support these conclusions." The work previously done indicate that ~12 cubic yards of contaminated soil remains in place at the site. However, this conclusion is based on speculative data, as only one soil sample was taken at the site. No soil samples were taken at any of the 7 locations where the SCAPS rig indicated "Strong", "Weak", or "Possible" POL (Petroleum, Oil, and Lubricants). Therefore, board staff requests that soil samples be taken, around the presumed limit of TPH-impacted soil, to confirm extent of the contamination. It is noted that contamination appears to be below the water table. It is also noted that the source has been removed and previous excavation has been completed. The decision to recommend further excavation or approve the request for closure will be evaluated after sample results have been reviewed.
2. **UST 315:** Previous soil samples taken from west side wall of the excavation indicated the presence of gas and diesel above clean up levels. Only one SCAPS probe was done near this location, the others were done at least 10 feet away. Board staff requests at least 1 soil sample on the west side of the excavation limit and 1 on the north side be taken, as close to the excavation limit as practical, for verification of the SCAPS results.
3. **UST 328:** Board staff concurs with the recommendation that further assessment at this site may be conducted in order to adequately delineate the limits of the TPH-impacted soil. One soil sample (EC-328-01) was taken at location downgradient of the tank, where SCAPS showed "No POL", but no sample was taken at location closer to tank where SCAPS showed "Weak POL" (EC-328-05). Board staff concurs with the recommendation for excavation of contaminated soil. The Navy may choose not to take additional samples

in order to more accurately define the limit of contamination; however board staff will require confirmation samples of the excavation boundary in order to grant closure. Staff also concurs with the recommendation for groundwater sampling downgradient of the site in order to determine if any constituents of concern are present.

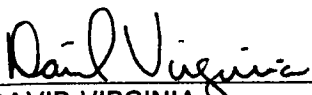
4. UST 333: Board staff are unsure as to what findings show that the vertical and horizontal extent of fuel impacted soils have been delineated to the extent practical in the northerly direction. The conclusion states, "data obtained during the current investigation indicate that the soil contamination is limited in the northerly, downgradient direction, suggesting the impacted soil may be limited in extent". It is not clear which data shows no contamination in any other direction since no samples were taken at this site during this investigation and SCAPS was only used in north and north westerly directions. Board staff concurs with the recommendation for further assessment of both soil and groundwater at this site.
5. UST 400: Board staff concurs with the recommendation for further assessment. Additional soil data should be collected in the northerly, westerly, and southerly directions using hand auger methods or a limited access probe. Soil samples from these areas should be tested for constituents of concern (TPH-Diesel and TPH-Gasoline) to confirm whether or not concentrations exceed clean up standards.
6. UST's 400(A)(1) and 400 (B)(2): Previous and current investigations at these UST's have confirmed the presence of an MTBE plume that extends approximately 170 feet down gradient from the former tank site. The detected concentrations exceed the Maximum Contamination Level (MCL) for this constituent. No BTEX (Benzene, Toluene, Ethylbenzene, Xylenes) compounds were detected during the current investigation, suggesting that natural attenuation is occurring. However, MTBE biodegrades and attenuates at a much slower rate than BTEX compounds.

A vacuum-enhanced pumping (VEP) system is installed at IR Site 7, which is approximately 800 feet downgradient of this site. The pumping activities associated with this remediation appear to have created a "dynamic groundwater regime" in which the radius of influence includes to some extent the UST Site 400(A)(B). Due to this influence, investigation and/or remediation of the MTBE plume is not recommended at this time. Board staff concurs with the recommendation that further assessment of groundwater is necessary at this site, and should be conducted approximately 6 to 12 months following the shut down of the VEP system at IR Site 7 to allow for restoration of equilibrium conditions.

7. UST 528: Board staff concurs with the conclusion that "further assessment may be conducted to delineate the extent of soil contamination to the north and west". Furthermore, board staff believes that additional assessment is needed to the south and east of the former tank as well, unless data not presented in the summary can show that this would not be necessary. Five (5) SCAPS probes were done at this site, 4 of which showed "Weak POL". However no follow up samples were taken at those locations, and the only sample taken was from the fifth SCAPS probe location where "No POL" was indicated.
8. UST 547: Board staff concurs with the recommendation for excavation of contaminated soil at this site.
9. UST 510: Approximately 50 cubic yards of contaminated soil was removed from this site in 2004. However, no soil confirmation results were included with the Site Closure Summary. Please submit analytical results for the excavation for verification.

10. UST 537: This UST is located very close to building 537. Based on SCAPS investigations as well as previous analysis, there appears to be significant contamination at the former tank site. Based on these findings, the vertical and horizontal extent of fuel impacted soils has been delineated to the north, east, and south. However, building 537 is located immediately adjacent to the west, making investigation in that direction and excavation in the immediate vicinity unfeasible. Board staff concurs with the recommendation of further assessment and remediation. However, according to NAF El Centro environmental representatives, the building is not scheduled for demolition anytime in the near future. As a result, a land use control or other such regulatory limitation should be placed on the site, and the results of all previous investigations and any pertinent data regarding the presence of contamination should be included in the Base Master Plan (BMP) or equivalent document for future reference.
11. UST 550: At this site, the location of the tank was previously unknown. Subsequent investigations by Bechtel indicated a possible position. TPH-Diesel was detected at a concentration of 79,000 mg/kg in soil samples taken at that site. During the current investigation, seven (7) SCAPS probes were done. However, the location of these probes in relation to the spot where high concentrations of TPH-D were detected is unknown. The tank is shown on the map provided with the Closure Summary but it is not known if this is the same spot. The SCAPS probe indicated "Possible POL" at this location but no samples were taken for verification. At one location where SCAPS showed "Strong POL", two (2) samples were taken but both were outside of the contamination intervals as described in the section PWC Investigation. No samples were taken in the area of the former pothole where there was some electromagnetic anomaly that might indicate the past presence of a pipeline. Board staff requests further clarification on the potential location of the tank and a confirmation soil sample at that location.
12. UST 551 (I)(N): Previous investigations at the UST site showed concentrations of TPH-Diesel ranging from 5,400 to 20,720 milligrams per kilogram, according to the *Final Tech Memorandum, Underground Storage Tank Site Investigation*, dated March 2000 (BNI). During the current investigation, the SCAPS rig showed "No POL" at 4 locations around the tank, however no confirmation samples were taken. Given the high concentrations of diesel previously found at the site, and no record of excavation or other remediation, Board staff requests that at least one confirmation soil sample be taken at the site. If constituents of concern are not present or are present at levels below regulatory concern, then the site will be considered for closure.
13. UST 551: Board staff does not concur with the conclusion that further assessment is unnecessary at this site. Previous investigations have indicated the presence of TPH-Diesel above clean up goals. The current investigation consisted of five (5) SCAPS probes, four (4) of which indicated "Weak POL" or "Possible POL". However, soil samples were only taken one of those locations, approximately 10 feet upgradient of the tank location, and one of those those samples was taken above the upper edge of the presumed contamination interval. The other soil sample was taken ~25 feet downgradient of the tank, where SCAPS had indicated "No POL". Board staff requests that a confirmation soil sample be taken at a position close to the tanks former location to verify the absence of contaminants of concern. This sample should be within the presumed contamination interval.

Board staff looks forward to working with the Navy in expediting any investigation and remediation needed at these sites in order to close and remove them from the active UST program. Should you have any questions, comments, or concerns regarding this correspondence, please contact me at (760) 776-8973.



DAVID VIRGINIA
Environmental Scientist (C)

DV/hs

cc: Mr. David Bloom, Anteon Corp.
Ms. Angie Lind, SWDIV
Mr. John Patskan, SWDIV

File: DoD, Naval Air Facility, El Centro.

TANK CLOSURE SUMMARY

Site Information

Site Name Former UST-120
Site Address Building 120, Naval Air Facility El Centro. Located adjacent to Building 120

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DOOT22430056

Date spill/leak reported to regulatory agency: December 13, 1999 (estimated)
Estimated date discharge/leak was discovered: January/February 1999 (estimated)
How discharge/leak was discovered: Field Investigation, January/February 1999
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 13, 1999
Completion date for active remediation: December 13, 1999

	Easting	Northing
Coordinates for tanks:	6736382.00000	1885170.75000

Dates for sample analysis: January/February 1999 through January/February 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. All analytical results for groundwater are below tap water PRGs and drinking water MCLs.

RECEIVED
FEB 06 2000
REGION 1

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 25 feet below ground surface.

Is groundwater or surface water impacted?

No. All analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

UST removed January 2000

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST removed January 2000

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 12 feet of fill material) and the contaminants do not pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

Signature

Liann P. Chavez R.G. Date 3-3-04

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region

RECEIVED

MAR 5 2004

REGION 7



NAVAL AIR FACILITY EL CENTRO



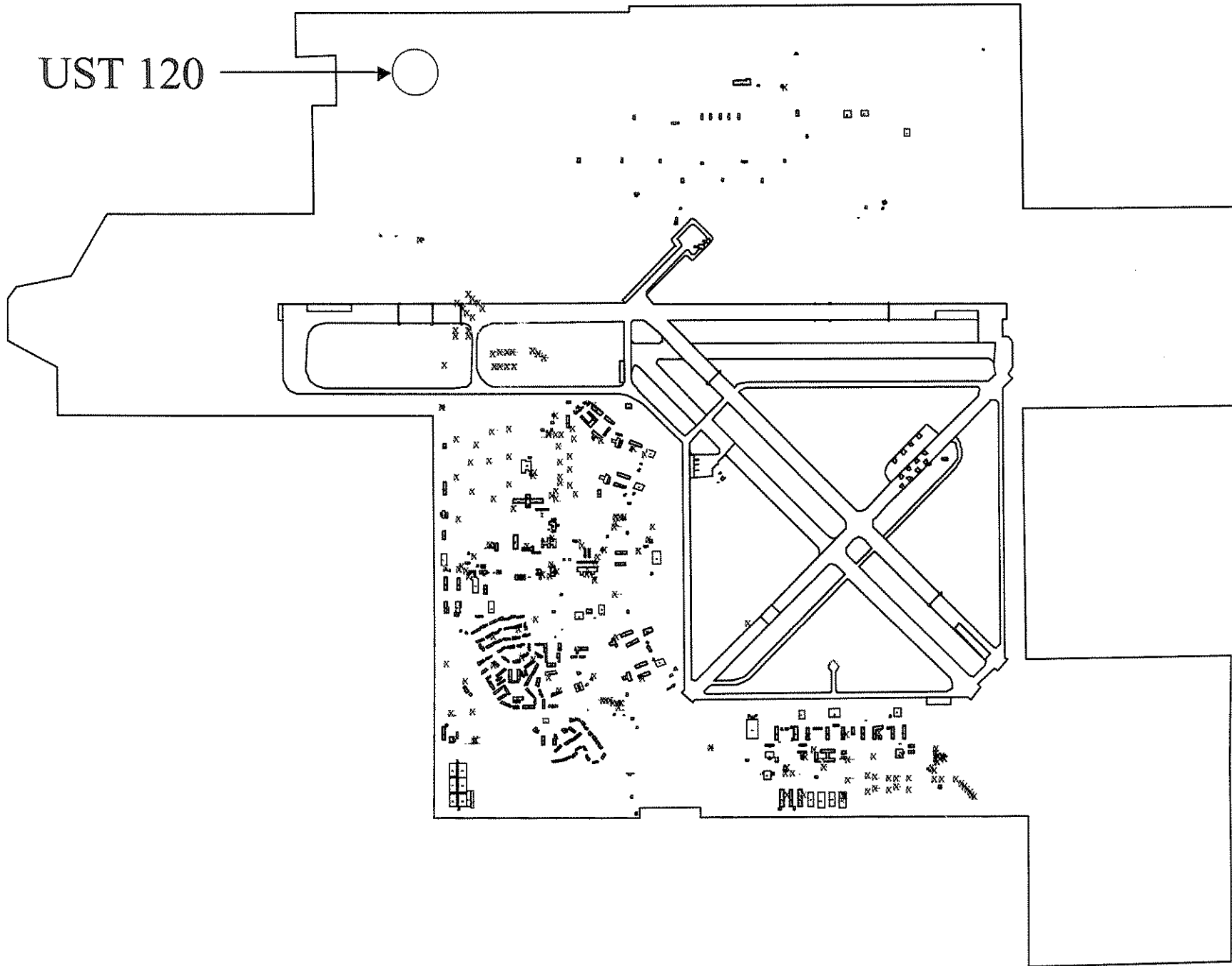
UST 120:

700 gallon fiberglass diesel UST

Removed January 2000

Recommended for Closure – Geofon 2000

UST 120





Planning Department

COUNTY OF IMPERIAL

PLANNING / BUILDING INSPECTION / PLANNING COMMISSION / A.L.U.C.

Jurg Heuberger, AICP - Director

February 14, 2000

CERTIFIED LETTER #Z-199-485-934

Geofon, Incorporated
ATTN: Brad Shojae
Quality Control Manager
22632 Golden Springs Drive, #270
Diamond Bar, CA 91765

Case File Number: T-1136

Site: NAF, Building 120, El Centro

Dear Mr. Shojae:

This letter confirms the completion of site investigation and remedial action for the underground storage tank(s), formerly located at the above described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground and above ground storage tank(s) are greatly appreciated.

Based on the information in the American Environmental Testing Laboratories, Inc., AETL Job #13952, dated December 21, 1999, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of Title 23 of the California Code of Regulations.

Please contact our office at (760) 339-4238 if you have any questions regarding this matter.

Sincerely,

Jerry Stilwell
Underground Storage Tank Coordinator

cc: Jurg Heuberger, Planning Director
Joanne Yeager, Assistant County Counsel
Darrell Gardner, Planning Division Manager
Tank File T1136

JLS/cd/NAF120.UST

939 MAIN STREET, SUITE B-1, EL CENTRO, CA., 92243 - 2656 (760) - 339 - 4236
FAX No. (760) - 353 - 8338

INTERNET E-MAIL

planning@icoc.k12.ca.us

IMPERIAL COUNTY OFFICIALS

INTERNET FAX

PLANNING DIVISION

Analytical Results for UST 120

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^{b,c}	TRPH	Benzene ^d	Toluene ^d	Ethylbenzene ^d	Total Xylenes ^d	MTBE ^d	Organolead ^e
Soil Results – GEOFON, Soil Removal/Field Investigation, January/February 2000 (ug/kg)											
120-01-12'	Excavation	12		346 ^f		5 U	5 U	5 U	10 U	10 U	NA
120-02-03'	Excavation	3		10 U ^f		5 U	5 U	5 U	10 U	10 U	NA
120-04-12'	Excavation	12		98 ^f		5 U	5 U	5 U	10 U	10 U	NA
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S051	120-S1	7.6		11 U		0.056 U	0.11 U	0.11 U	0.11 U	1.1 U	NA
175S052	120-S1	12.4		12 U		0.06 U	0.12 U	0.12 U	0.12 U	1.2 U	NA
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP21	120-H1	22 – 26 ^g		0.5 U		0.5 U	1.2	1.0 U	1.1	10 U	NA

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c diesel results for groundwater reported in milligrams per liter
- ^d analyzed using U.S. EPA Method 8021-B
- ^e analyzed by California Leaking Underground Fuel Tank Method
- ^f diesel results reported in milligrams per kilogram
- ^g HydroPunch screened interval

Acronyms/Abbreviations:

µg/L – micrograms per liter (parts per billion)
bgs – below ground surface
BNI – Bechtel National, Inc.
mg/kg – milligrams per kilograms (parts per million)
MTBE – methyl-tert-butyl ether
NA – not analyzed
TPH – total petroleum hydrocarbons
TRPH – total recoverable petroleum hydrocarbons
U – not detected above the referenced detection limit
UST – underground storage tank

Sources: Geofon September 2000, BNI March 2000 Technical Memorandum 1

APPROXIMATE GROUNDWATER
GRADIENT DIRECTION

EMERGENCY
HOLDING
POND

120-H1
Groundwater
TOLUENE 1.2 ug/l
TOTAL XYLENES 1.1 ug/l

UST 120

120-S1
NO ANALYTES DETECTED AT
THIS LOCATION

▲ AST 120

CLARIFIER

ACCESS ROAD

IRRIGATION
CANAL

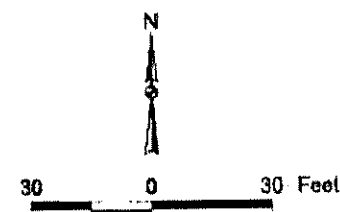
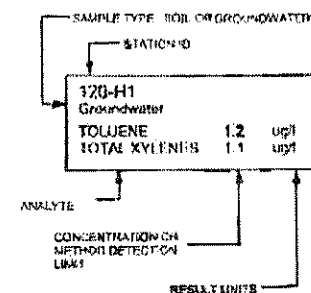
LEGEND

- UST/ABOVEGROUND STORAGE TANKS
- ▲ ABOVEGROUND STORAGE TANKS
- ⊕ MONITORING WELL LOCATIONS
- ⊕ PEG/METER LOCATIONS
- SAMPLING LOCATIONS
- ⊕ SOIL BORINGS
- NAF EL CENTRO BOUNDARY
- BUILDING
- ROADS
- HIGHWAY
- RIVER
- FENCE
- TANKS
- FIELDS
- DRAINAGE OR IRRIGATION CANAL
- MAJOR DRAIN
- DRAINAGE FLOW

NOTES

ALL ANALYTICAL DATA PRESENTED ON THIS
FIGURE IS FROM CURRENT 1999 SITE
INVESTIGATIONS

ALL SOIL AND GROUNDWATER SAMPLES
COLLECTED DURING THE CURRENT INVESTIGATIONS
WERE ANALYZED FOR VMTB



Final Technical Memorandum, UST S1
Figure 4-5
Site 120 - Site Map

NAF El Centro, Imperial County, California



Bechtel National, Inc.
CLEAN II Program

Date: 8/5/99
File No: 175L4053
Job No: 22214-175
Rev No: 14

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-121
Site Address: East of A Street and north of Building 191, beneath concrete aircraft parking apron at Naval Air Facility El Centro

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430059

Date spill/leak reported to regulatory agency:	No spill leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tanks:	6739428.50000	1879163.50000

Dates for sample analysis: January 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no evidence of soil contamination was identified.

Estimated volume of contaminated soil left on site and concentration: Not applicable, no soil contamination identified.

Is groundwater contamination completely delineated? Yes. All analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 16 feet below ground surface.

Is groundwater or surface water impacted? No. All analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken? UST closed in place in 1986

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? UST closed in place in 1986

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material and at least 1 foot of concrete) and the absence of contaminants at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

Signature

Liann P. Chavez

Date

3-26-04

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



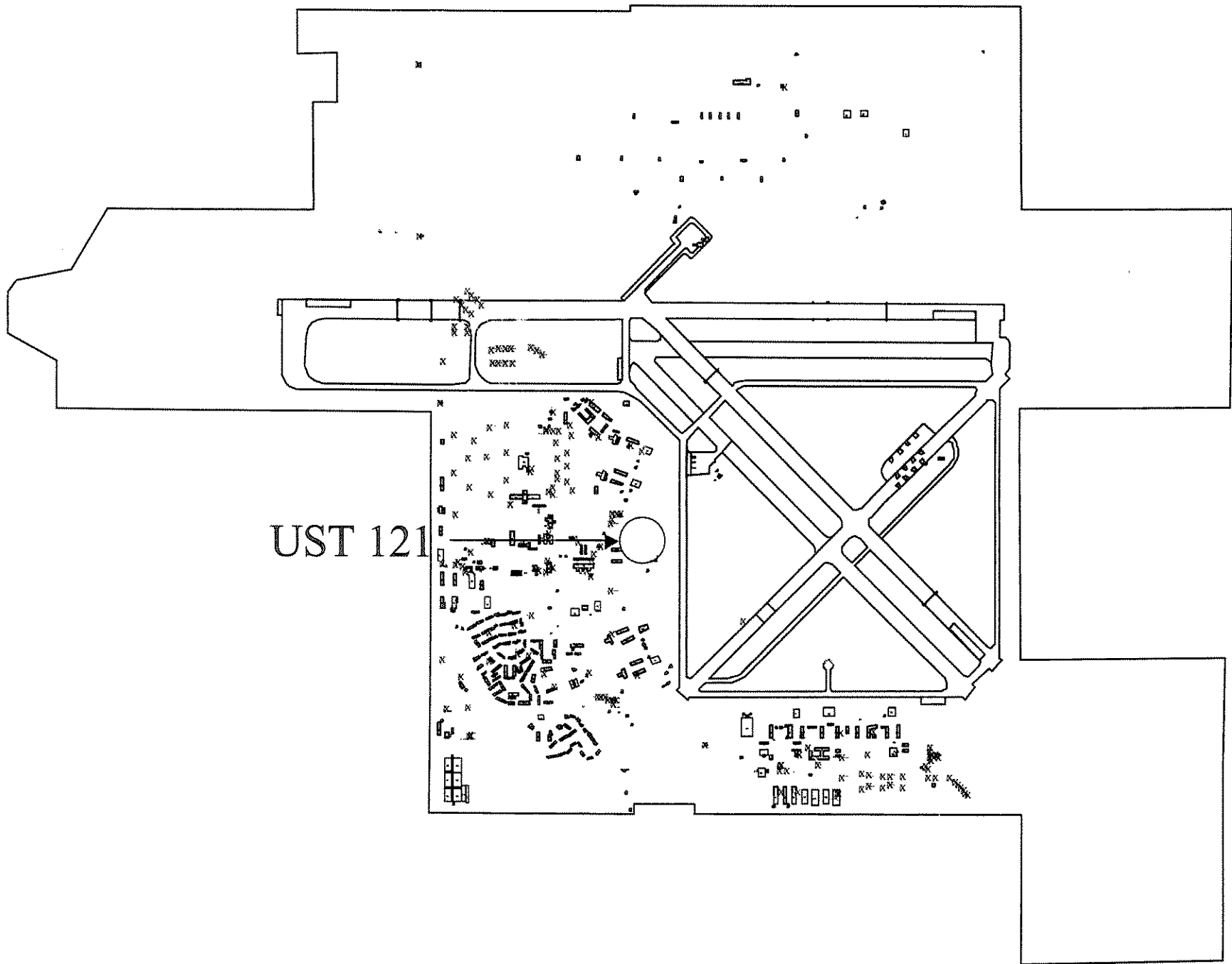
UST 121:

2400 gallon concrete diesel UST

Abandoned in place 1986

Recommended for Closure – BNI Tech Memo 2

UST 121



LEGEND:

☐ UNDERGROUND STORAGE TANKS

SOIL BORING / HYDROPUNCH SAMPLING LOCATIONS

--- FENCE

/ \ ROADS

☐ BUILDINGS

SAMPLE TYPE SOIL OR GROUNDWATER

STATION ID DEPTH IN FEET
(SOIL ONLY)

121-S1		
Groundwater	14.5	
DIESEL	3.5	MG/L
TOLUENE	0.53	UG/L

ANALYTE

CONCENTRATION OR
METHOD DETECTION
LIMIT

RESULT UNITS

NOTES:
UG/L = MICROGRAMS PER LITER
MG/L = MILLIGRAMS PER LITER

100 0 100 Feet

UST Investigation TM Addendum

Figure 4-2

Site Map - UST 121

NAF El Centro, Imperial Valley, California

**Bechtel National, Inc.**
CLEAN II ProgramDate: 11/22/00
File No.: 175L5092
Job No.: 22214-175
Rev No.: C**121-S1**

Groundwater	14.5-18	
DIESEL	3.5	MG/L
TOLUENE	0.53	UG/L

UST
121

190

191

240

112

Analytical Results for Underground Storage Tank 121

Sample Number	Location	Depth (feet bgs)	TPH as Diesel*	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)									
175S113	121-S1	10 – 10.5	31 U	50 U	75 U	50 U	100 U	50 U	120 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)									
175HP70	121-S1	14.5 – 18	3.5	0.2 U	0.53	0.2 U	0.4 U	0.2 U	0.5 U J

Note:

* TPH as diesel results reported in milligrams per kilogram for soil and milligrams per liter for groundwater (parts per million)

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram (parts per billion)

µg/L – micrograms per liter (parts per billion)

MTBE – methyl-tert-butyl ether

TPH – total petroleum hydrocarbons

Data Qualifiers:

J – estimated value

U – not detected

Source BNI November 2000, Technical Memorandum 2

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-129
Site Address: Open area immediately northeast of the intersection between B and South Streets, Naval Air Facility El Centro.

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430057

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	No discharge/leak identified
How discharge/leak was discovered:	No discharge/leak identified
Cause of discharge/leak:	No discharge/leak identified
Start date for active remediation:	07 December 1994
Completion date for active remediation:	08 December 1994

	Easting	Northing
Coordinates for tanks:	6738347.00000	1879710.62500

Dates for sample analysis: December 1994 and February 1995

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. All analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Groundwater encountered at approximately 12 feet below ground surface during excavation

Is groundwater or surface water impacted?

No. All analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

Soil at former UST location excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Soil at former UST location excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 23 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

10/05

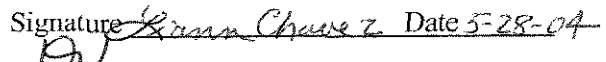
N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Signature



Date

5-28-04

Liann P. Chavez, R.G.

Senior Engineering Geologist

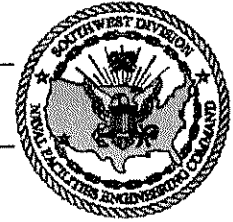
California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



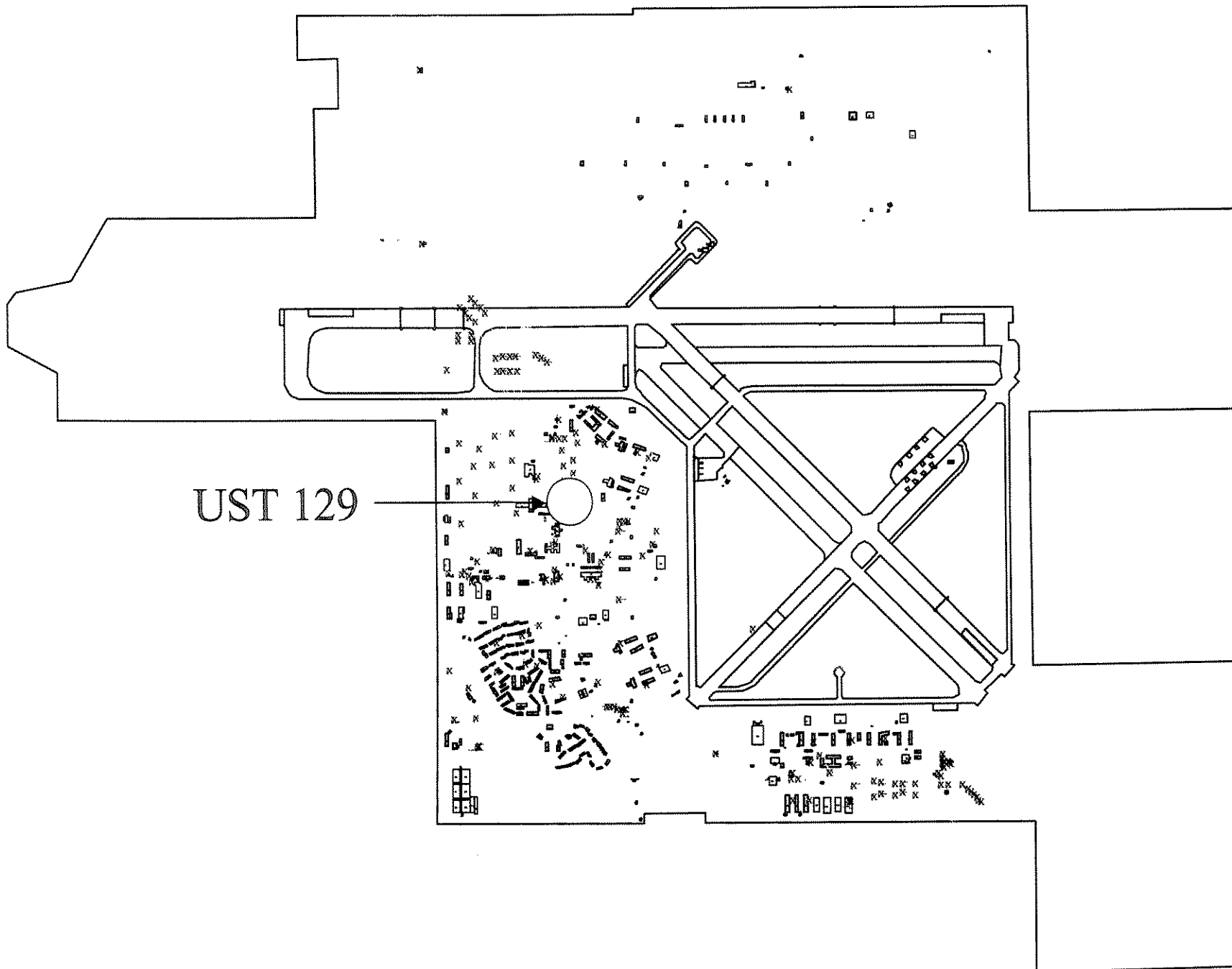
UST 129:

500 gallon concrete diesel UST

Removed 1994

Recommended for Closure – OHM 1995

UST 129



RO 0:19:23:27 11/1/95 9:10:55 C:\PROJECTS\16542\16542009

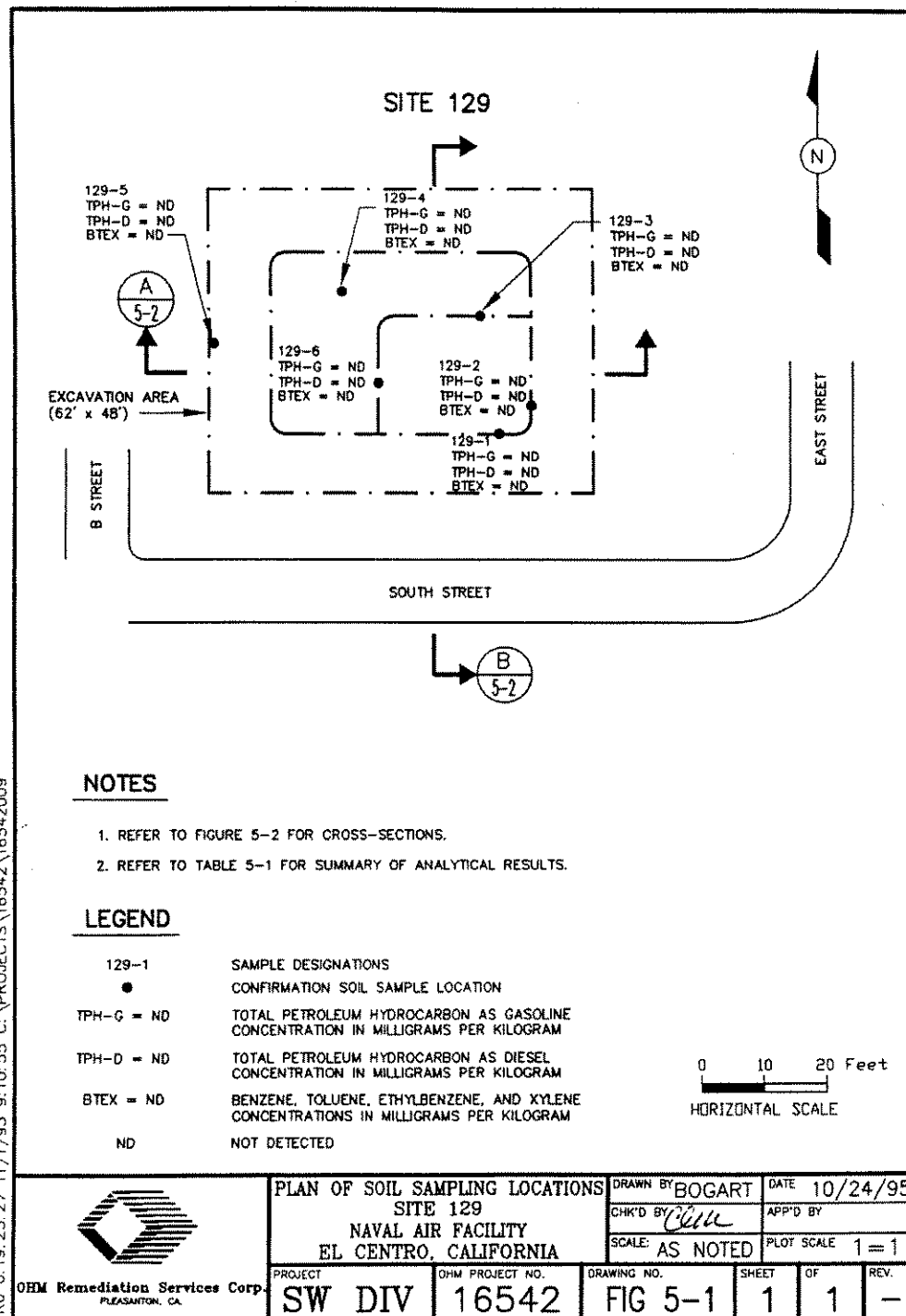


TABLE 5-1
SITE 129 ANALYTICAL RESULTS

EXCAVATION CONFIRMATION:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
2/15/95	129-1/SW	10'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	129-2/EW	10'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	129-3/B	12'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	129-4/WW	5'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	129-5/WW	4'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	129-6/B	12'	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/30/94	129-BF	NR	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

PERCHED WATER:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
2/15/95	129-W2	12'	WATER	ND	ND	ND	ND	.075	NR
2/20/95	129-2/20	-	WATER	ND	ND	ND	ND	ND	ND
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported
 ND: Not Detected
 WW: West Wall
 NW: North Wall
 SW: South Wall
 EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name Former UST-130
Site Address Building 130, Naval Air Facility El Centro. Located adjacent to east corner of Building 130

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 71D00T22430058

Date spill/leak reported to regulatory agency: 1993 (estimated)
Estimated date discharge/leak was discovered: 1993 (estimated)
How discharge/leak was discovered: Field investigation, 1993
Cause of discharge/leak: Leaking UST
Start date for active remediation: UST removed in 1993
Completion date for active remediation: UST removed in 1993

	Easting	Northing
Coordinates for tanks:	6739186.50000	1880178.37500

Dates for sample analysis: January 1994 and January/February 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. All analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12 to 16 feet below ground surface

Is groundwater or surface water impacted?

No. All analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

UST removed in 1993

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST removed in 1993

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

Signature

Liann P. Chavez

Date

3-25-04

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



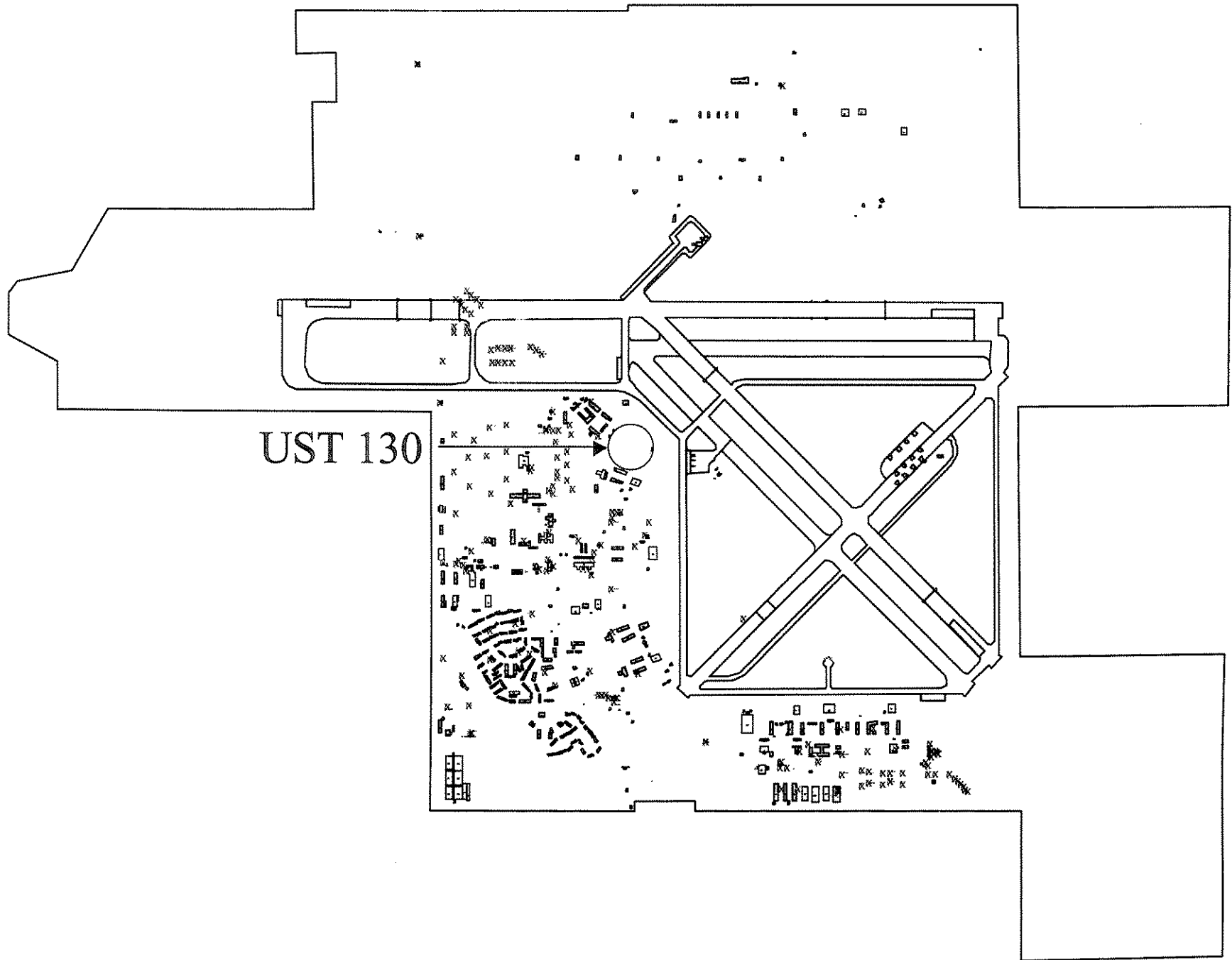
UST 130:

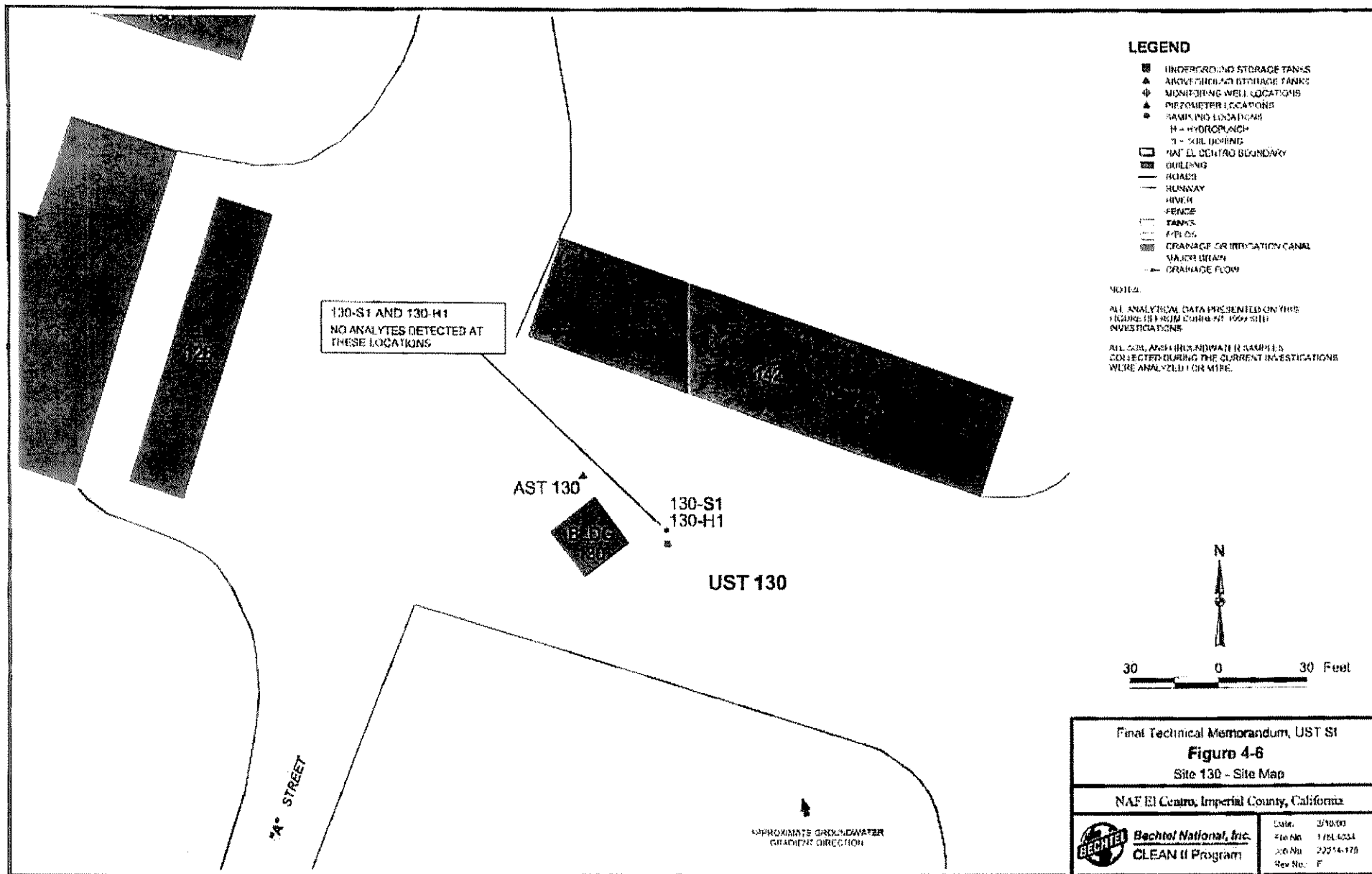
250 gallon steel diesel UST

Removed 1993

Recommended for Closure – BNI Tech Memo 1

UST 130





Analytical Results for UST 130

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene ^c	Total Xylenes ^c	MTBE ^c	Organolead ^d
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S047	130-S1	7.8	NA	13 U	NA	0.06 U	0.13 U	0.13 U	0.13 U	1.3 U	NA
175S048	130-S1	11.6	NA	13 U	NA	0.06 U	0.13 U	0.13 U	0.13 U	1.3 U	NA
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP19	130-S1	12 – 16 ^e	NA	0.5 U ^f	NA	0.5 U	1.0 U	1.0 U	1.0 U	10 U	NA
Historical Data, Soil Results – Kroeker, Inc., UST Removal Phase 2, 20 January 1994 (mg/kg)^g											
130-S1		4	NA	NA	21,000	NA	NA	NA	NA	NA	NA
130-S2		2.5	NA	NA	1,700	NA	NA	NA	NA	NA	NA

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021-B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e HydroPunch screened interval
- ^f diesel results for groundwater reported in milligrams per liter
- ^g collected during UST removal

Acronyms/Abbreviations:

µg/L – micrograms per liter (parts per billion)
 bgs – below ground surface
 BNI – Bechtel National, Inc.
 mg/kg – milligrams per kilograms (parts per million)
 MTBE – methyl-tert-butyl ether
 NA – not analyzed
 TPH – total petroleum hydrocarbons
 TRPH – total recoverable petroleum hydrocarbons
 U – not detected above the referenced detection limit
 UST – underground storage tank

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-136
Site Address: Open area along the east side of B Street between North and South Streets, Naval Air Facility El Centro.

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 71DOOT22430061

Date spill/leak reported to regulatory agency: 1994 (estimated)
Estimated date discharge/leak was discovered: 1994 (estimated)
How discharge/leak was discovered: Field investigation, 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: 12 December 1994
Completion date for active remediation: 13 December 1994

	Easting	Northing
Coordinates for tanks:	6738345.00000	1880080.75000

Dates for sample analysis: December 1994 and January 1995

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 17 feet below ground surface.

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

Soil at former UST location excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Soil at former UST location excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 17 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Date

6-1-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



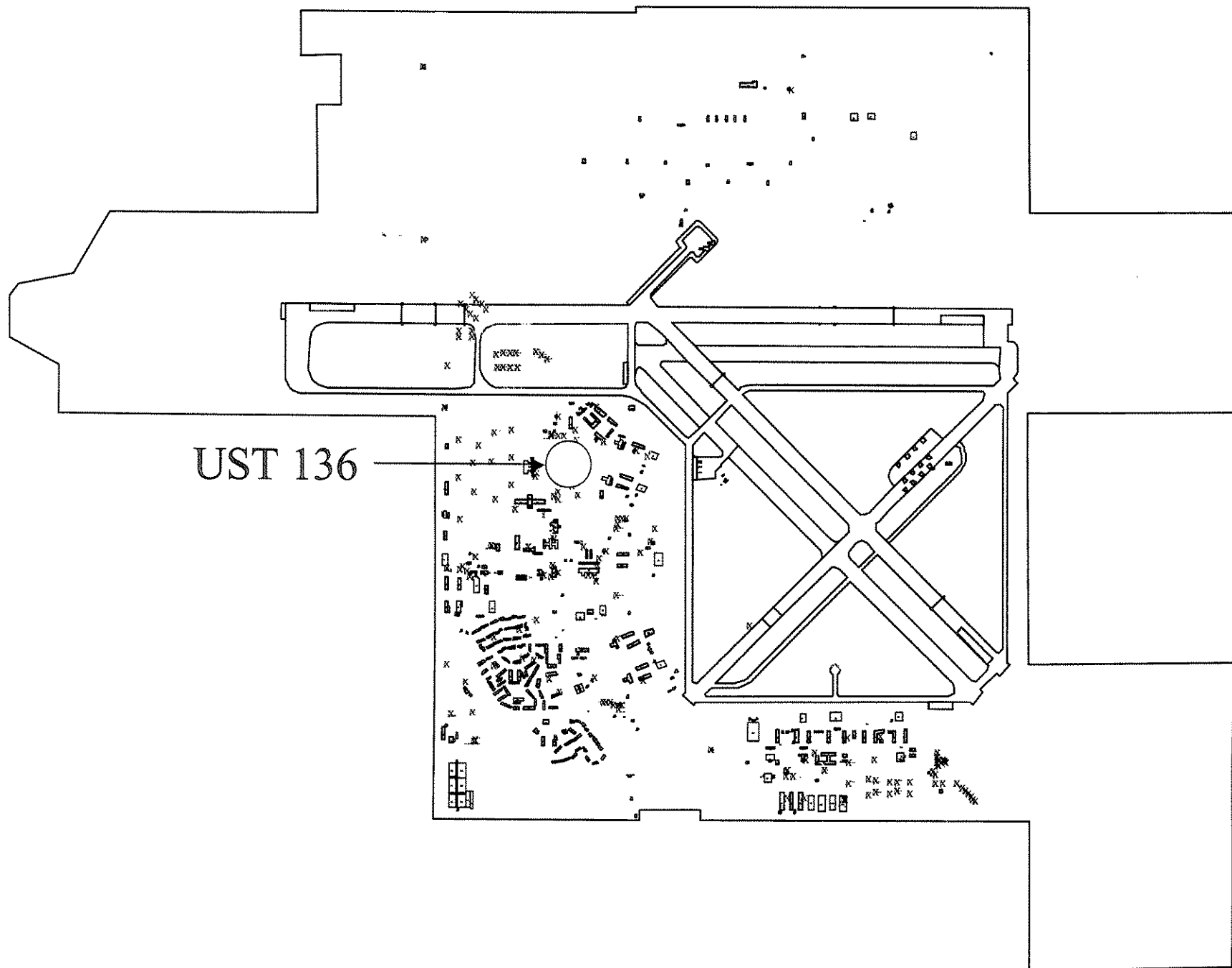
UST 136:

500 gallon concrete diesel UST

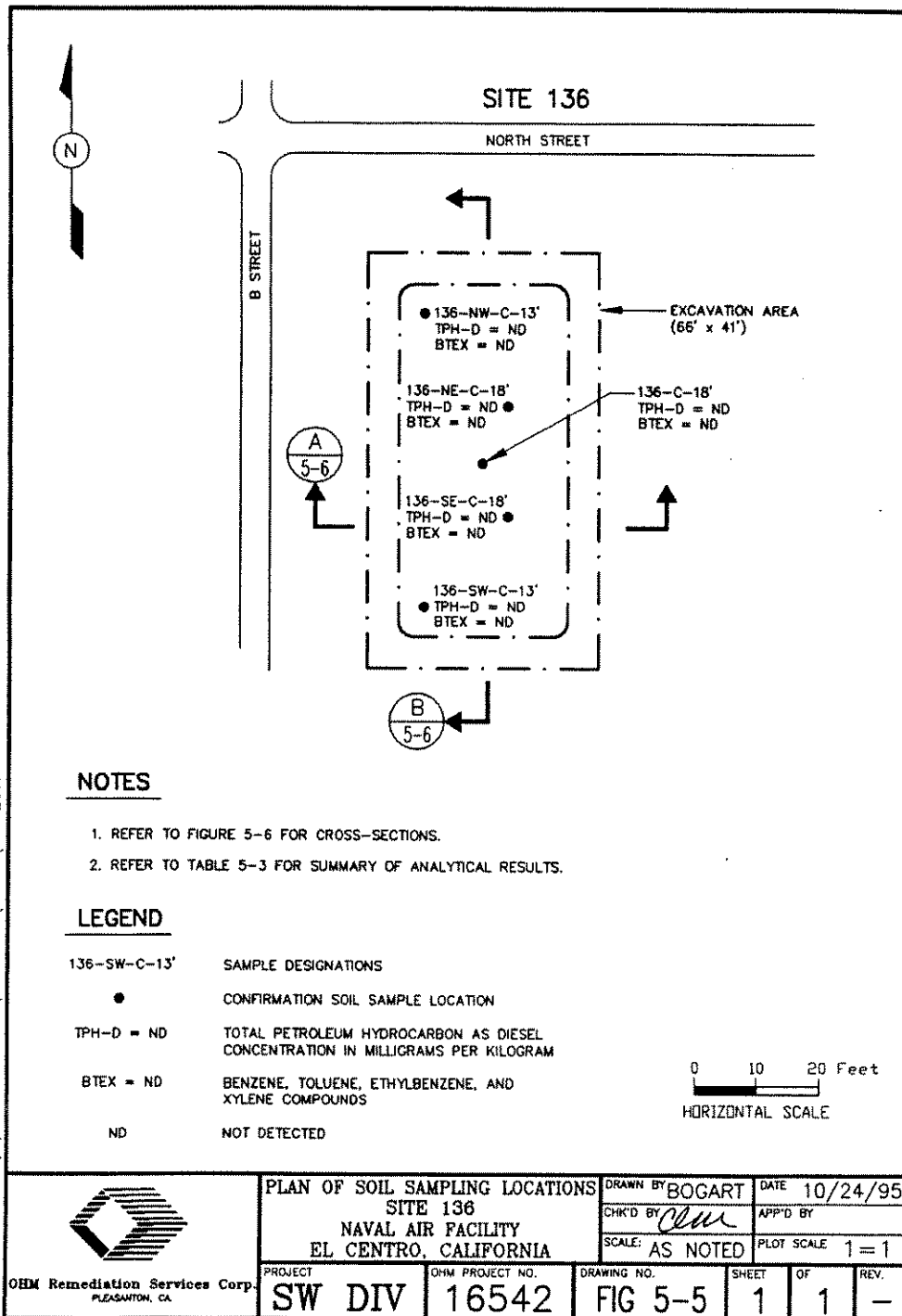
Removed 1994

Recommended for Closure – OHM 1995

UST 136



RD 0: 3: 48: 27 11/1/95 9:12:24 C:\PROJECTS\16542\16542011



**TABLE 5-3
SITE 136 ANALYTICAL RESULTS**

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene mg/kg	Toluene mg/kg	Ethyl- Benzene mg/kg	Total Xylenes mg/kg	Gasoline mg/kg	Diesel mg/kg
12/12/94	136-C-18/B	18'	SOIL	ND	ND	ND	ND	NR	ND
12/12/94	136-SW-C- 13/NWC	13'	SOIL	ND	ND	ND	ND	NR	ND
12/12/94	136-SE-C- 18/SEC	18'	SOIL	ND	ND	ND	ND	NR	ND
12/12/94	136-NW-C- 13/NWC	13'	SOIL	ND	ND	ND	ND	NR	ND
12/12/94	136-NE-C- 18/NEC	18'	SOIL	ND	ND	ND	ND	NR	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene mg/kg	Toluene mg/kg	Ethyl- Benzene mg/kg	Total Xylenes mg/kg	Gasoline mg/kg	Diesel mg/kg
12/30/94	136-BF	-	SOIL	ND	ND	ND	ND	ND	1100
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

TABLE 5-3
SITE 136 ANALYTICAL RESULTS
 (continued)

PERCHED WATER:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl- Benzene	Total Xylenes	Gasoline	Diesel
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
12/22/94	136-W	20'	WATER	ND	ND	ND	ND	ND	NR
1/17/95	136-W	20'	WATER	NR	NR	NR	NR	NR	0.120
1/23/95	136-W#2	20'	WATER	ND	ND	ND	ND	ND	NR
1/30/95	136-W	20'	WATER	NR	NR	NR	NR	NR	ND
1/30/95	136-W	20'	WATER	ND	ND	ND	ND	ND	NR
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported
 ND: Not Detected
 NEC: North East Corner Wall
 NWC: North West Corner Wall
 SWC: South West Corner Wall
 SEC: South East Corner Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-137
Site Address: Building 137, Naval Air Facility El Centro. Located adjacent to the southwest corner of Building 137

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DOOT 22430009

Date spill/leak reported to regulatory agency: 1994 (estimated)
Estimated date discharge/leak was discovered: 1994 (estimated)
How discharge/leak was discovered: Field Investigation, January 1995
Cause of discharge/leak: Leaking UST piping
Start date for active remediation: January 1995
Completion date for active remediation: January 1995

	Easting	Northing
Coordinates for tanks:	6739333.00000	1880114.37500

Dates for sample analysis: January 1995 and January/February 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. All analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12 to 16 feet below ground surface

Is groundwater or surface water impacted?

No. All analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

UST removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST removed in 1995

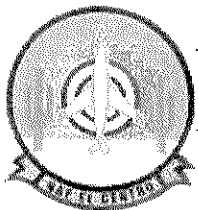
Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 17 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature _____ Date _____

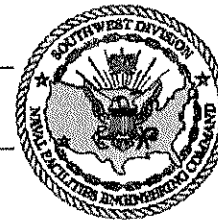
N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature Liann P. Chavez Date 5-3-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



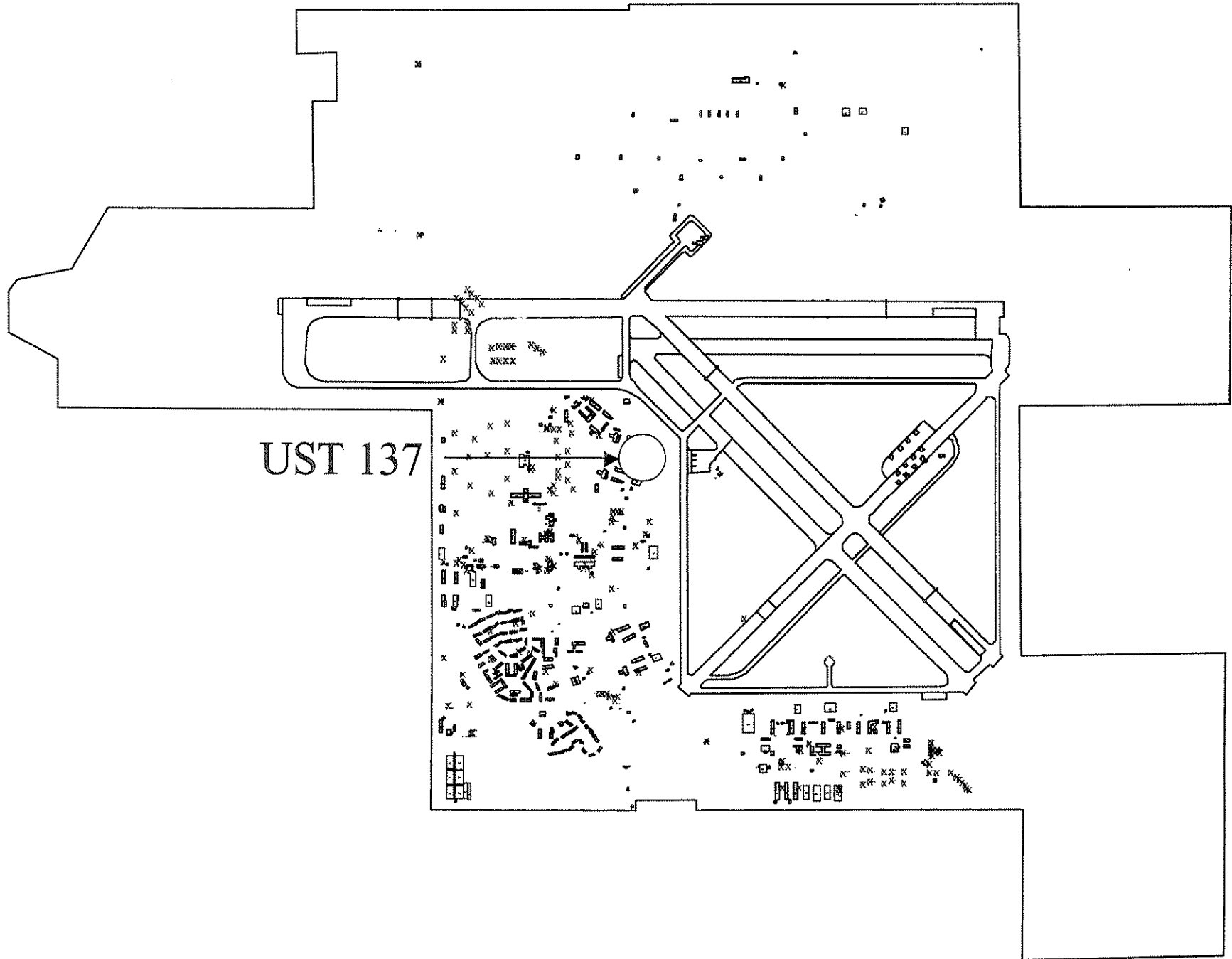
UST 137:

300 gallon steel diesel UST

Removed 1995

Recommended for Closure – BNI Tech Memo 1

UST 137



Analytical Results for Site 137

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene ^c	Total Xylenes ^c	MTBE ^c	Organolead ^d
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S045	137-S1	8.2	NA	13 U	NA	0.06 U	0.13 U	0.13 U	0.13 U	1.3 U	NA
175S046	137-S1	11.3	NA	13 U	NA	0.06 U	0.13 U	0.13 U	0.13 U	1.3 U	NA
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP17	137-H1	12 – 16 ^e	NA	0.5 U ^f	NA	0.5 U	1.0 U	1.0 U	1.0 U	10 U	NA
175HP18 ^g	137-H1	12 – 16	NA	0.5 U	NA	0.5 U	1.0 U	1.0 U	1.0 U	10 U	NA
Historical Data, Soil Results – Environmental Chemical Corp., UST Removal Phase 3, January 1995 (mg/kg)^h											
Excavation		Unknown	NA	NA	20 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Pipe trench		Unknown	NA	NA	12,000	0.027	0.079	0.053	0.27	NA	NA

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021-B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e HydroPunch screened interval
- ^f diesel results for groundwater reported in milligrams per liter
- ^g duplicate groundwater sample
- ^h collected during UST removal

Acronyms/Abbreviations:

µg/L – micrograms per liter (parts per billion)
bgs – below ground surface
BNI – Bechtel National, Inc.
mg/kg – milligrams per kilograms (parts per million)
MTBE – methyl-tert-butyl ether
NA – not analyzed
TPH – total petroleum hydrocarbons
TRPH – total recoverable petroleum hydrocarbons
U – not detected above the referenced detection limit
UST – underground storage tank

Source: BNI March 2000, Technical Memorandum 1

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-141
Site Address: Open area on the south side of North Street between B and East Streets,
Naval Air Facility El Centro.

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000F 224 30078

Date spill/leak reported to regulatory agency: 1994 (estimated)
Estimated date discharge/leak was discovered: 1994 (estimated)
How discharge/leak was discovered: Field Investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: 13 December 1994
Completion date for active remediation: 13 December 1994

	Easting	Northing
Coordinates for tanks:	6738395.00000	1880311.37500

Dates for sample analysis: December 1994

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Not Estimated, TPH-diesel at 43 milligrams per kilogram

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 12 feet below ground surface

Is groundwater or surface water impacted? No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken? Soil at former UST location excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Soil at former UST location excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 11 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

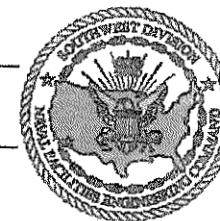
Signature N.R. Wells Date 6/7/05 Signature Liann Chavez Date 5-16-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

BSF
P Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

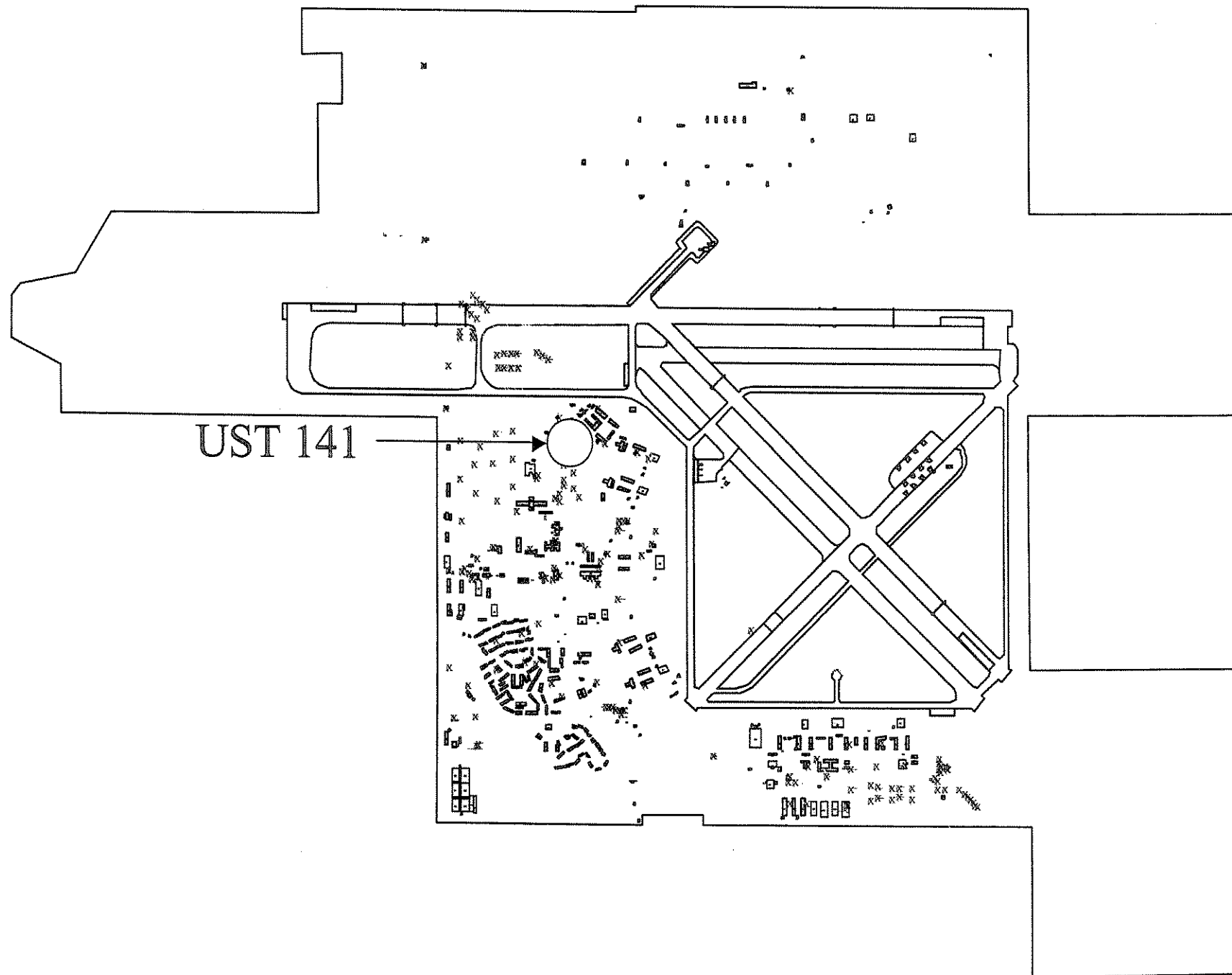


UST 141:

500 gallon concrete diesel UST

Removed 1994

Recommended for Closure – OHM 1995



UST 141

RO. O: 3: 54: 29 11/17/95 8: 09: 42 C: \PROJECTS\16542\16542013

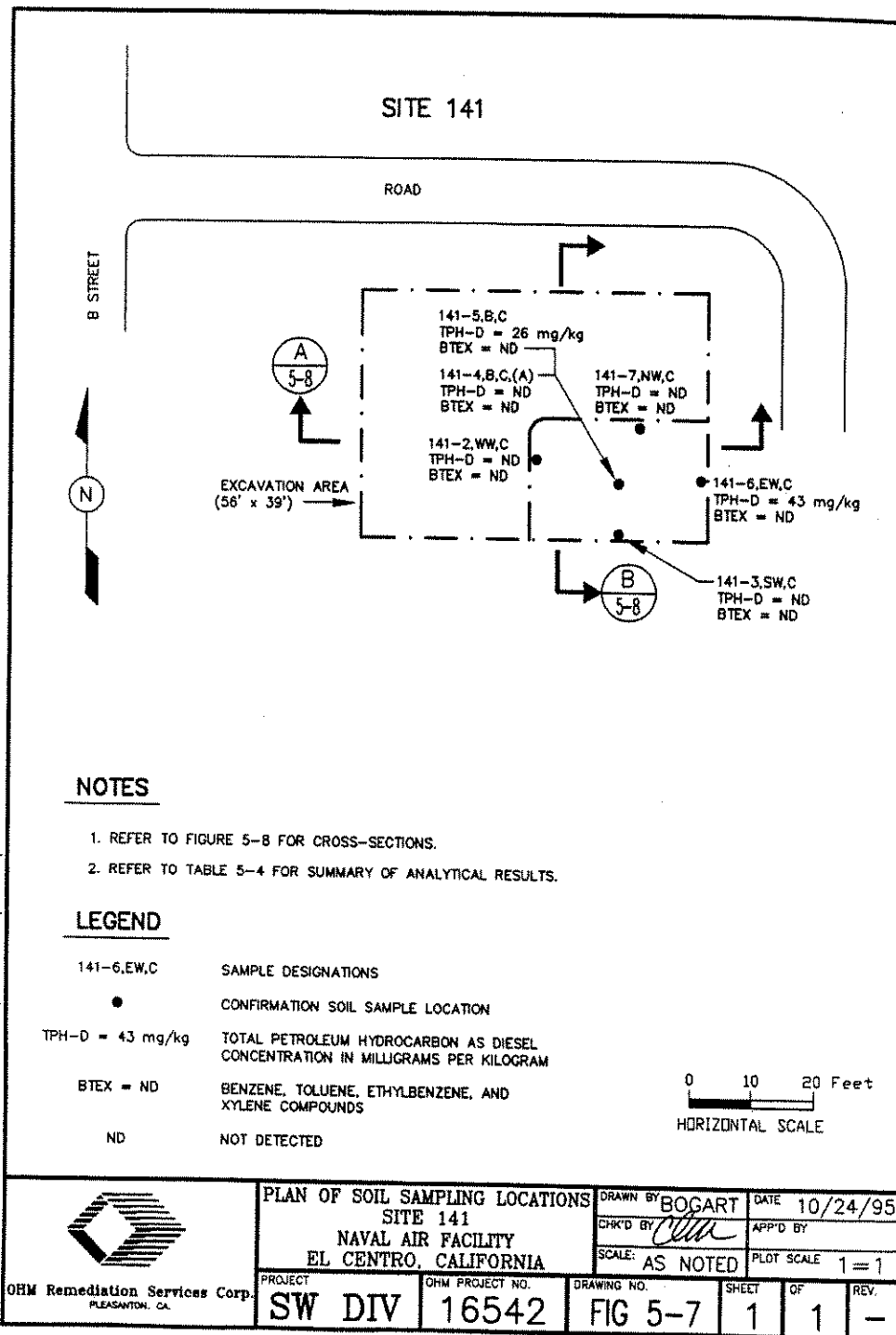


TABLE 5-4
SITE 141 ANALYTICAL RESULTS

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/13/94	141-2,WW,C/WW	13'	SOIL	ND	ND	ND	ND	NR	ND
12/13/94	141-3,SW,C/SW	13'	SOIL	ND	ND	ND	ND	NR	ND
12/13/94	141-4,B,C,(A)/B	14'	SOIL	ND	ND	ND	ND	NR	ND
12/13/94	141-5,B,C/B	14'	SOIL	ND	ND	ND	ND	NR	26
12/13/94	141-6,EW,C/EW	13'	SOIL	ND	ND	ND	ND	NR	43
12/13/94	141-7,NW,C/NW	13'	SOIL	ND	ND	ND	ND	NR	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/29/94	141-BF	-	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

PERCHED WATER:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
12/22/94	141-W	12'	WATER	ND	ND	ND	ND	ND	NR
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported
 ND: Not Detected
 SPH: South Pothole
 NPH: North Pothole
 WW: West Wall
 NW: North Wall
 SW: South Wall
 EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name Possible UST-165
Site Address Building 165, Naval Air Facility El Centro. Possible location adjacent to the southeast side of Building 165

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	No evidence of a discharge/leak
How discharge/leak was discovered:	No evidence of a discharge/leak
Cause of discharge/leak:	Not applicable
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tanks:	6738760.00000	1880289.87500

Dates for sample analysis: January/February 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. No soil contamination identified during investigation. Possible presence of a previously unknown tank was based solely on geophysical survey data.

Estimated volume of contaminated soil left on site and concentration: Not applicable. No tank or soil contamination identified at this location

Is groundwater contamination completely delineated?
results for groundwater are non-detect.

No contamination identified. Analytical

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 14 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are non-detect

Remedial action taken?

Not applicable. No tank or evidence of contamination identified at this location

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Not applicable

Remedial action taken?

Not applicable. No tank or evidence of contamination identified at this location

Site Closure: Because the presence of a UST was not confirmed and no soil or groundwater contamination was identified at this location, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



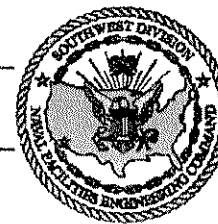
Date 5-3-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

RECEIVED
FEB 16 2005
REGION



NAVAL AIR FACILITY EL CENTRO



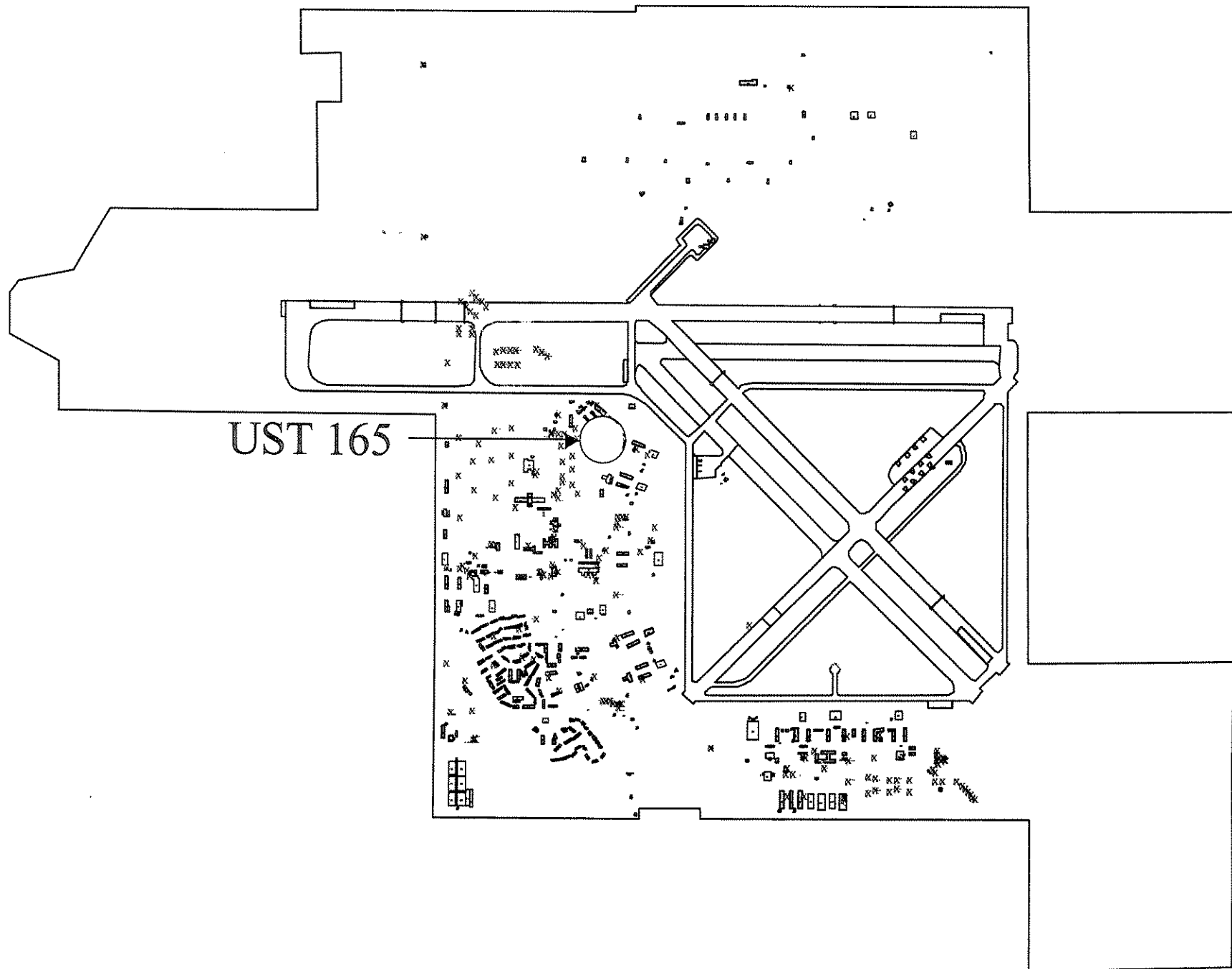
UST 165:

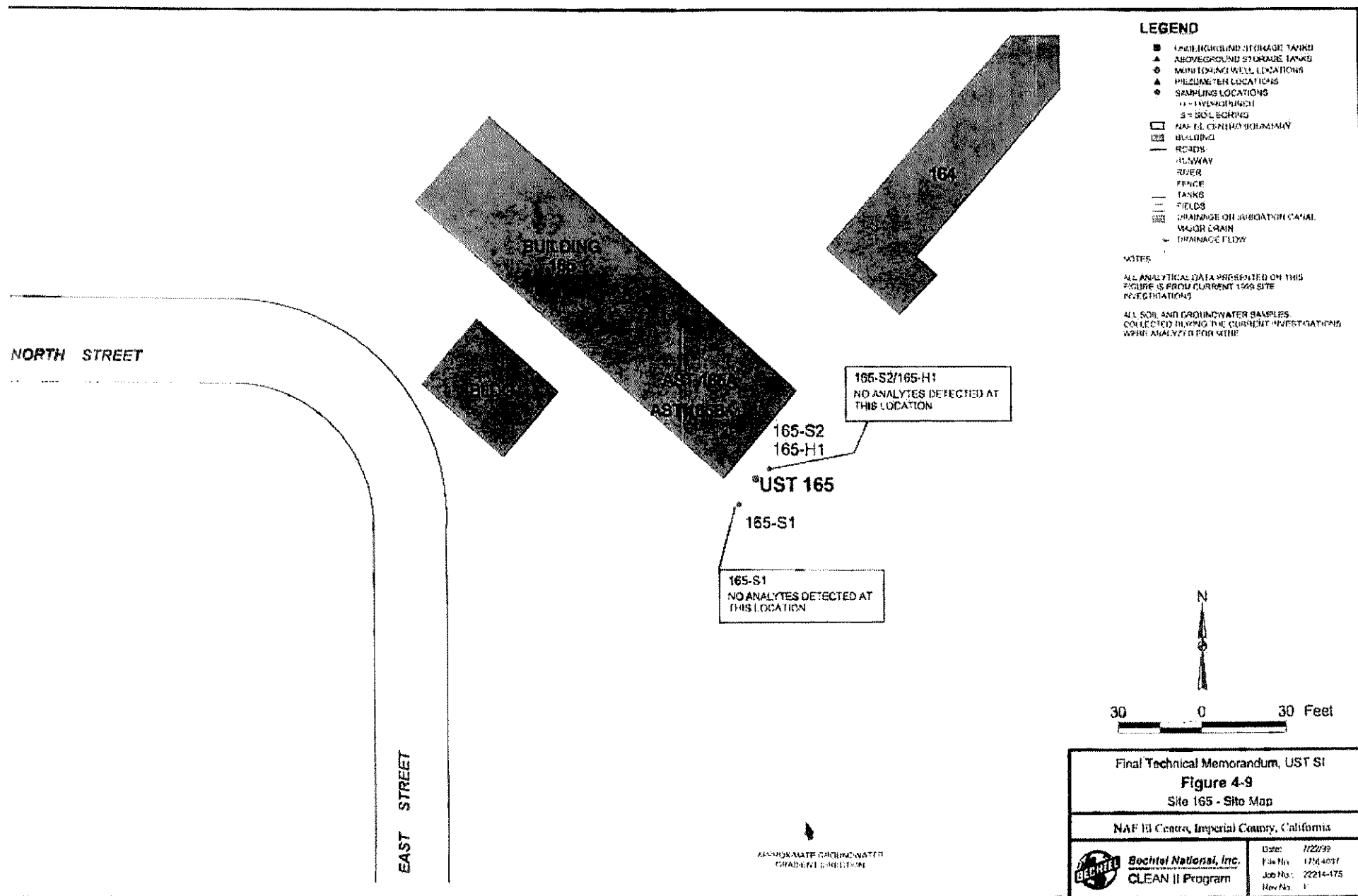
No historical documentation indicating a tank.

Geophysics suggested a possible tank

Soil borings found no evidence of contamination.

Recommended for Closure – BNI Tech Memo 1





Analytical Results for UST 165

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene ^c	Total Xylenes ^c	MTBE ^c	Organolead ^d
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S060	165-S1	8	1.2 U	12 U	NA	0.06 U	0.12 U	0.12 U	0.12 U	1.2 U	0.7 U
175S061	165-S1	11	1.3 U	13 U	NA	0.067 U	0.13 U	0.13 U	0.13 U	1.3 U	0.7 U
175S062	165-S2	8	1.2 U	12 U	NA	0.061 U	0.12 U	0.12 U	0.12 U	1.2 U	0.7 U
175S063	165-S2	12.2	1.3 U	13 U	NA	0.063 U	0.13 U	0.13 U	0.13 U	1.3 U	0.7 U
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP23	165-H1	14 – 18 ^e	500 U	0.5 U ^f	NA	0.5 U	1.0 U	1.0 U	1.6	10 U	0.1 U

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021-B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e HydroPunch screened interval
- ^f diesel results for groundwater reported in milligrams per liter

Acronyms/Abbreviations:

- µg/L – micrograms per liter (parts per billion)
- bgs – below ground surface
- BNI – Bechtel National, Inc.
- mg/kg – milligrams per kilograms (parts per million)
- MTBE – methyl-tert-butyl ether
- NA – not analyzed
- TPH – total petroleum hydrocarbons
- TRPH – total recoverable petroleum hydrocarbons
- U – not detected above the referenced detection limit
- UST – underground storage tank

Source: BNI March 2000, Technical Memorandum 1

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-214
Site Address: Building 214, Naval Air Facility El Centro. Located in grass courtyard on the south side of Building 214

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430062

Date spill/leak reported to regulatory agency: 1999 (estimated)
Estimated date discharge/leak was discovered: 1999 (estimated)
How discharge/leak was discovered: Field Investigation, February 1999
Cause of discharge/leak: Leaking UST
Start date for active remediation: February 2, 1999
Completion date for active remediation: February 2, 1999

	Easting	Northing
Coordinates for tanks:	6738607.50000	1878557.87500

Dates for sample analysis: February 1999 and April 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated. Soil confirmation sample analytical results were non-detect

RECEIVED
FEB 06 2001
REGION 1

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 14 to 15 feet below ground surface

Is groundwater or surface water impacted? No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken? UST removed and contaminated soil excavated on February 2, 1999

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? UST removed and contaminated soil excavated on February 2, 1999

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

Signature



Liann P. Chavez Date 5-3-04

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



UST 214:

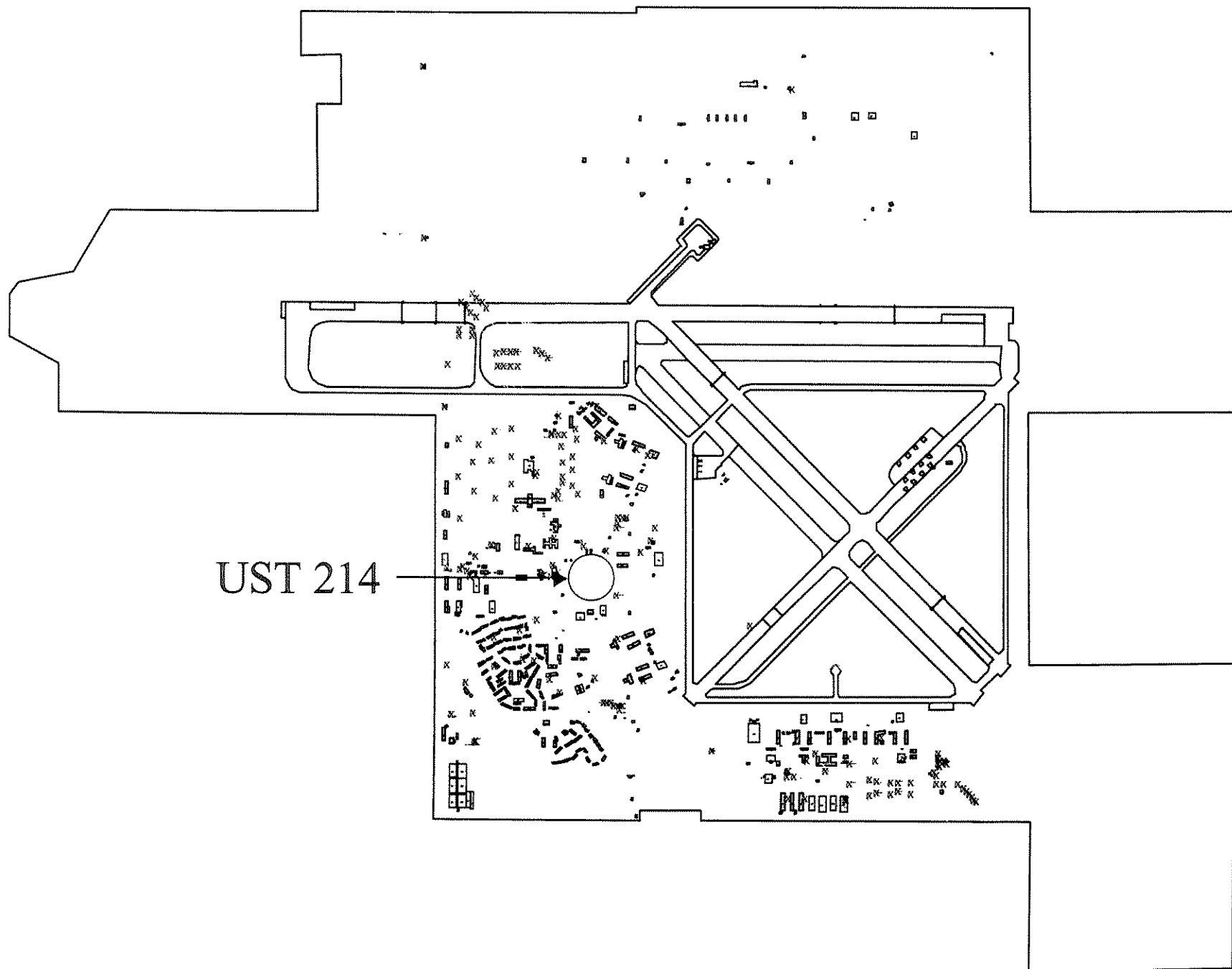
500 gallon steel diesel UST

Removed 1999

Recommended for Closure – BNI Tech Memo 3

OHM 1999

UST 214



3RD STREET

209

217

214

215

UST 214

218

285

214-H1

Groundwater

14.5

BENZENE

0.5

UG/L

ETHYL BENZENE

0.5

UG/L

METHYL TOLUENE

0.1

UG/L

METHYL TERT-BUTYL ETHER

0.5

UG/L

OXIDENE

0.7

UG/L

HEXANE

4.7

UG/L

116

A STREET

LEGEND:

UNDERGROUND STORAGE TANKS

SOIL BORING (HYDROPUNCH) SAMPLING LOCATIONS

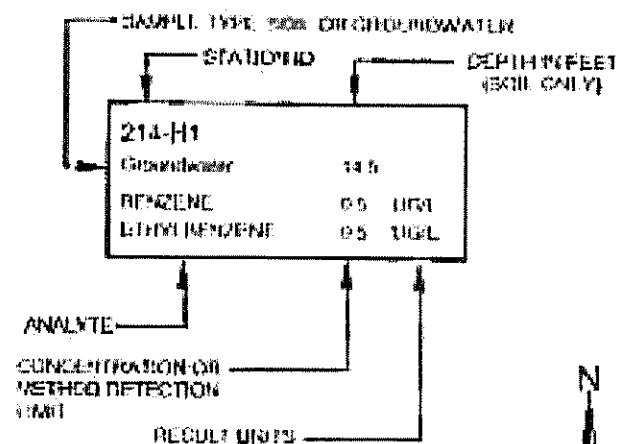
FENCE

WELL DRAIN

CULVERT

ROADS

BUILDINGS



NOTES

UG/L - MICROGRAMS PER LITER

MGL - MILLIGRAMS PER LITER

MKG/KG - MILLIGRAMS PER KILOGRAM

100

0

100 Feet

UST Site Investigation TM Addendum No. 3

Figure 4-3

Site Map - UST 214

NAP El Centro, Imperial Valley, California



Bechtel National, Inc.
CLEAN II Program

Date: 11/22/00
File No: 175A5650
Job No: 22214-175
Rev No: C

Analytical Results for UST Site 214

Sample Number	Location	Depth (feet bgs)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	Total Xylenes	MTBE
Groundwater Results – BNI Field Investigation, April 2000 (µg/L)											
175H104	214-H1	14.5 – 18	50 U	NA	0.3 J	2.2	0.2 J	0.9	0.3 J	NA	0.3 J
175H105 (Dup)	214-H1	14.5 – 18	50 U	NA	0.5	4.7	0.5	2.1	0.7	NA	0.5
Historical Soil Results – OHM Remediation Services Corp., February 1999 (mg/kg)											
920903-022	214-TP	8	13 U	NA	0.0064 U	0.0064 U	0.0064 U	NA	NA	0.019 U	0.032 U

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

Dup – duplicate sample

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

MTBE – methyl-tert-butyl ether

NA – not analyzed

TPH – total petroleum hydrocarbons

UST – underground storage tank

Data Qualifiers:

J – estimated value

U – not detected

Source: BNI November 2000, Technical Memorandum 3

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-312.1
Site Address: Open area on southeast side of intersection between D and 3rd Streets,
Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DOOT22430015

Date spill/leak reported to regulatory agency: 1996 (estimated)
Estimated date discharge/leak was discovered: 1996 (estimated)
How discharge/leak was discovered: Field Investigation, August 1996
Cause of discharge/leak: Leaking UST
Start date for active remediation: August 5, 1996
Completion date for active remediation: August 5, 1996 (estimated)

	Easting	Northing
Coordinates for tanks:	6736852.50000	1878634.50000

Dates for sample analysis: August 1996 and January/February 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12.5 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

UST removed in August 1996

Closure

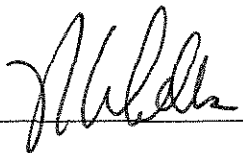
Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST removed in August 1996

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

Signature

Liann Chavez

Date

5-7-04

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



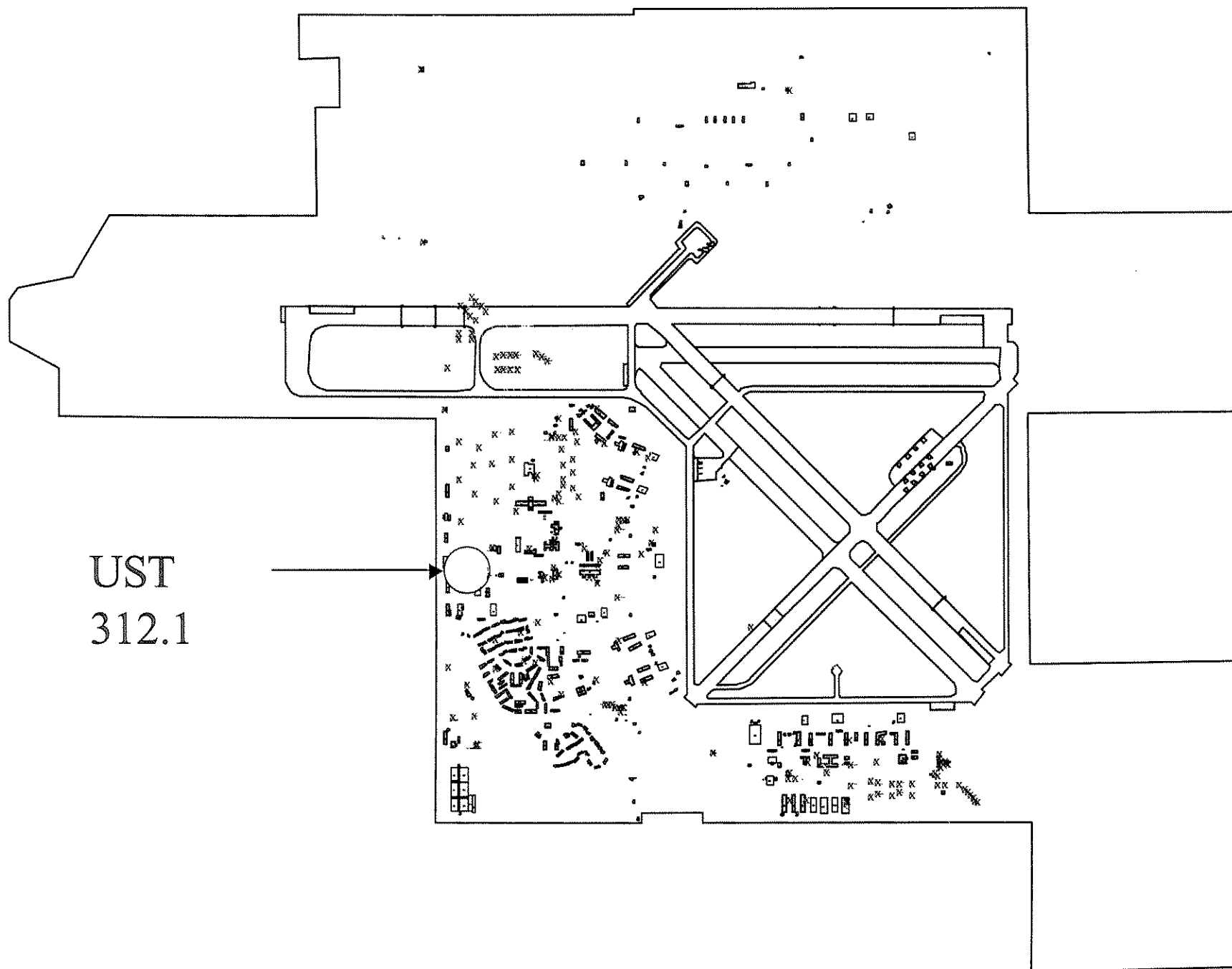
UST 312.1:

1000 gallon steel gasoline UST

Removed 1996

Recommended for Closure – BNI Tech Memo 3

UST
312.1



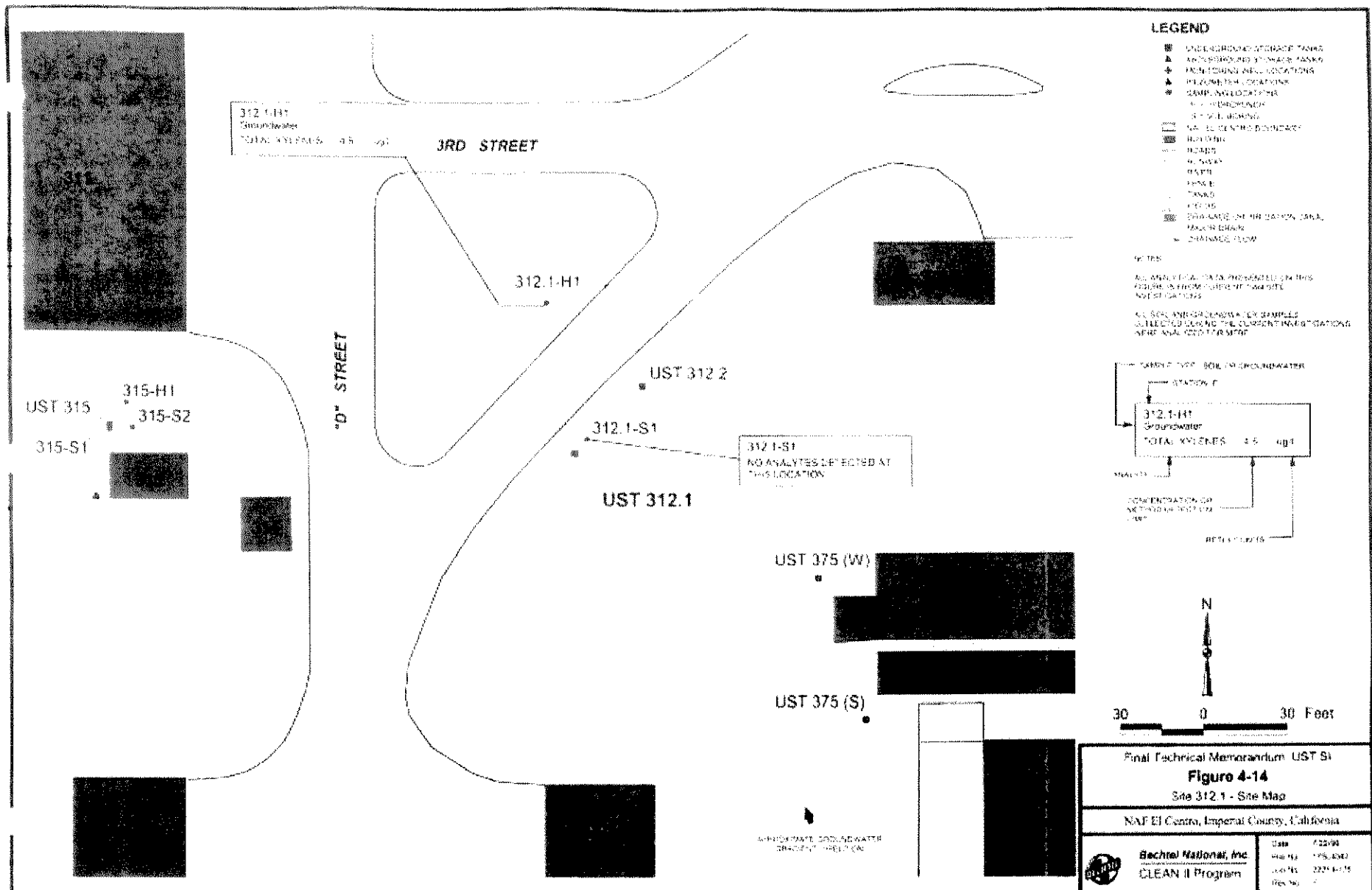


Table 4-13
Analytical Results for UST 312.1

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene ^c	Total Xylenes ^c	MTBE ^c	Organolead ^d
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S025	312.1-S1	6	1.3 U			0.065 U	0.13 U	0.13 U	0.13 U	1.3 U	0.6 U
175S026	312.1-S1	8.5	1.2 U			0.062 U	0.12 U	0.12 U	0.12 U	1.2 U	0.6 U
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP12	312.1-H1	12.5 – 14 ^e	500 U			0.5 U	1.0 U	1.0 U	4.5	10 U	0.1 U
Historical Data, Soil Results – Geofon, Inc., UST Removal Report, 05 August 1996 (mg/kg)^g											
312-1-1	Excavation	10		1,330 ^f		0.01	0.09	0.19	0.43		

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021-B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e HydroPunch screened interval
- ^f analyzed as TPH-kerosene
- ^g collected during UST removal

Acronyms/Abbreviations:

µg/L – micrograms per liter (parts per billion)
 bgs – below ground surface
 BNI – Bechtel National, Inc.
 mg/kg – milligrams per kilograms (parts per million)
 MTBE – methyl-tert-butyl ether
 TPH – total petroleum hydrocarbons
 TRPH – total recoverable petroleum hydrocarbons
 U – not detected above the referenced detection limit
 UST – underground storage tank

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-319
Site Address: Grass covered open area about 125 feet east of the corner of Mountain View Drive and Sand Drive, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: NTA 700072243 0064

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	No discharge/leak identified
How discharge/leak was discovered:	No discharge/leak identified
Cause of discharge/leak:	No discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tanks:	6737875.50000	1877969.25000

Dates for sample analysis: January/February 1999 and May 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no soil contamination was identified.

Estimated volume of contaminated soil left on site and concentration: Not applicable, no soil contamination identified.

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 14.5 feet below ground surface

Is groundwater or surface water impacted? No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken? UST removed prior to 1997

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? UST removed prior to 1997

Site Closure: Due to limited exposure pathways (i.e., no identified soil contamination and groundwater greater than 14 feet deep) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature

Liann Chavez

Date

5-7-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

RECEIVED

02 9 6 2004

REGION 7



NAVAL AIR FACILITY EL CENTRO



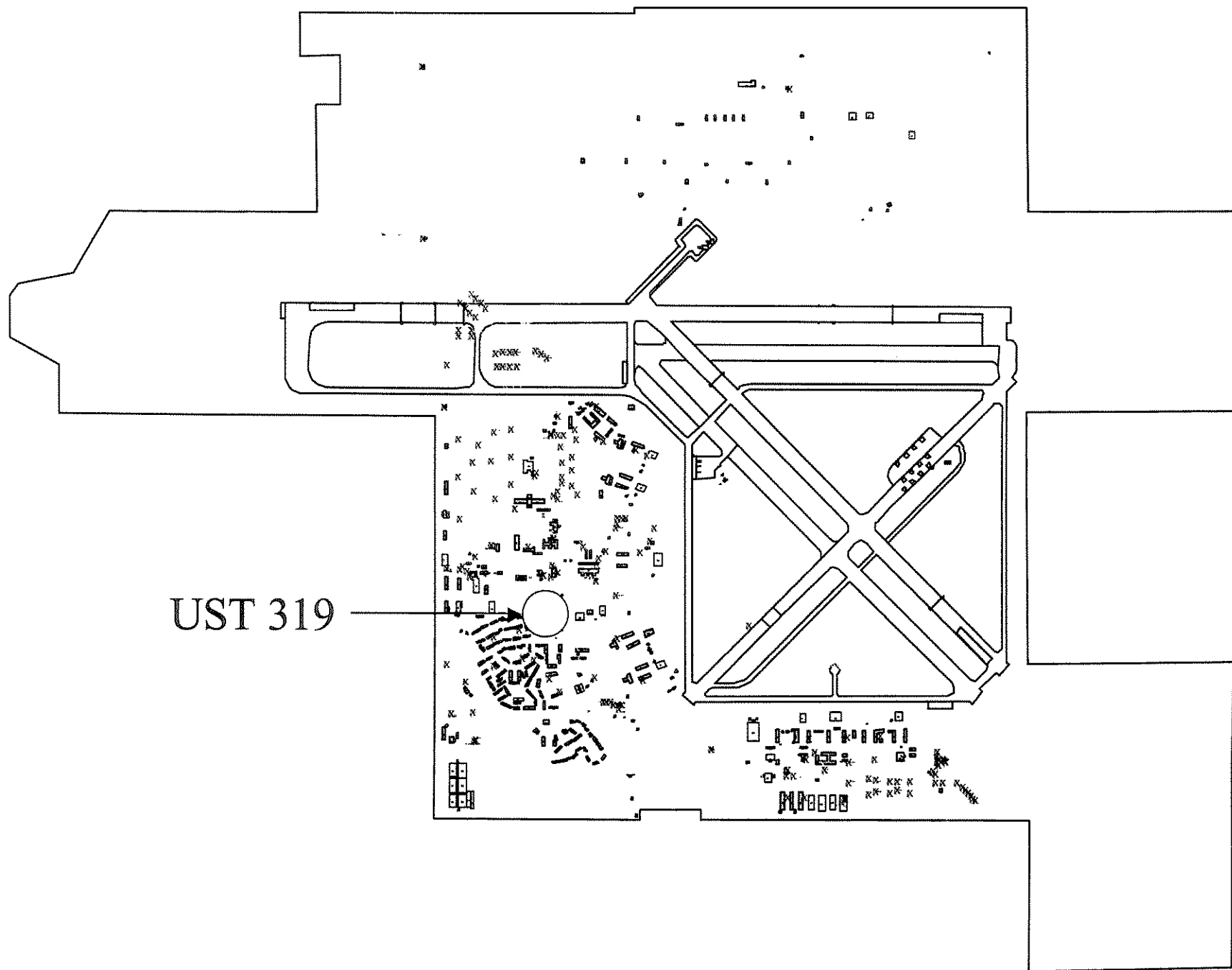
UST 319:

500 gallon concrete fuel oil UST

Year removed - unknown

Recommended for Closure – BNI Tech Memo 3

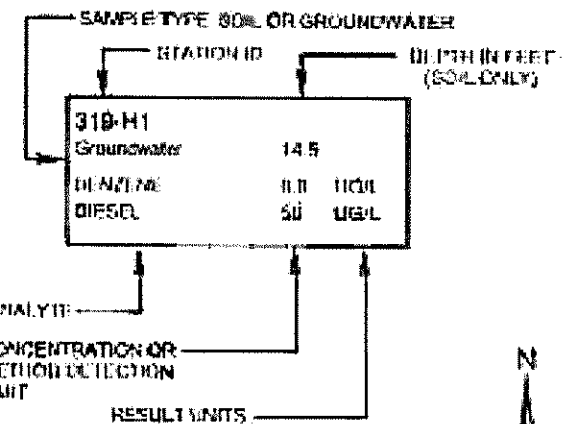
RECEIVED
FEB 06 2004
REGION 7



UST 319

LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORING / HYDROPUNCH SAMPLING LOCATIONS
- FENCE
- WET DRAIN
- CULVERT
- ROAD
- BUILDINGS



NOTES:
 UGL = MICROGRAMS PER LITER
 MGL = MILLIGRAMS PER LITER
 MGGG = MILLIGRAMS PER KILOGRAM

100 0 100 Feet

UST Site Investigation TM Addendum No. 3

Figure 4-5

Site Map - UST 319

NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
 CLEAN II Program

Date: 11/22/00
 File No: 17505652
 Job No: 22214-1/5
 Rev No: C

MORGAN FIELD
 312

319-H1		
Groundwater	14.5	
BENZENE	0.0	UG/L
DIESEL	50	UG/L
ETHYL BENZENE	0.1	UG/L
METHA-PARA XYLENE	0.4	UG/L
METHYL TERT-BUTYL ETHER	0.1	UG/L
O-XYLENE	0.1	UG/L
TOLUENE	4.5	UG/L

UST 319

BASEBALL FIELD

SAND DRIVE

2ND STREET

2ND STREET

3050

3057

3058

3047

3048

3039

3041

Analytical Results for UST Site 319

Sample Number	Location	Depth (feet bgs)	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	Total Xylenes	MTBE
Groundwater Results – BNI Field Investigation, April 2000 (µg/L)											
175HP97	319-H1	14.5 – 18	56	NA	0.8	4.5	0.1 J	0.4 J	0.1 J	NA	0.4 J
Historical Soil Results – OHM Remediation Services, Inc., January 1999 (mg/kg)											
920903-013	319-HA	6	26	13 U	0.0064 U	0.0064 U	0.0064 U	NA	NA	0.019 U	0.032 U

Acronyms/Abbreviations:

bgs – below ground surface
 BNI – Bechtel National, Inc.
 µg/L – micrograms per liter
 mg/kg – milligrams per kilogram
 MTBE – methyl-tert-butyl ether
 NA – not analyzed
 TPH – total petroleum hydrocarbons
 UST – underground storage tank

Data Qualifiers:

J – estimated value
 U – not detected

Source: BNI November 2000, Technical Memorandum 3

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-324
Site Address: Located north of Building 3014A near the intersection of Yorktown Street and Circle Street, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DDDT 22430065

Date spill/leak reported to regulatory agency:	No spill leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tanks:	6737836.50000	1877442.50000

Dates for sample analysis: January/February 1999 and May 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no soil contamination was identified.

Estimated volume of contaminated soil left on site and concentration: Not applicable, no soil contamination identified.

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 14.5 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

UST removed prior to 1997

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST removed prior to 1997

Site Closure: Due to limited exposure pathways (i.e., no identified soil contamination and groundwater greater than 14 feet deep) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

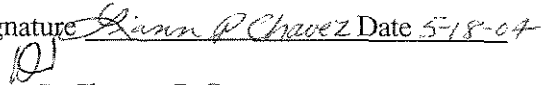
Signature



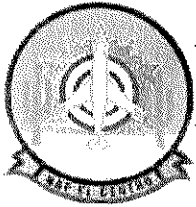
Date 1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

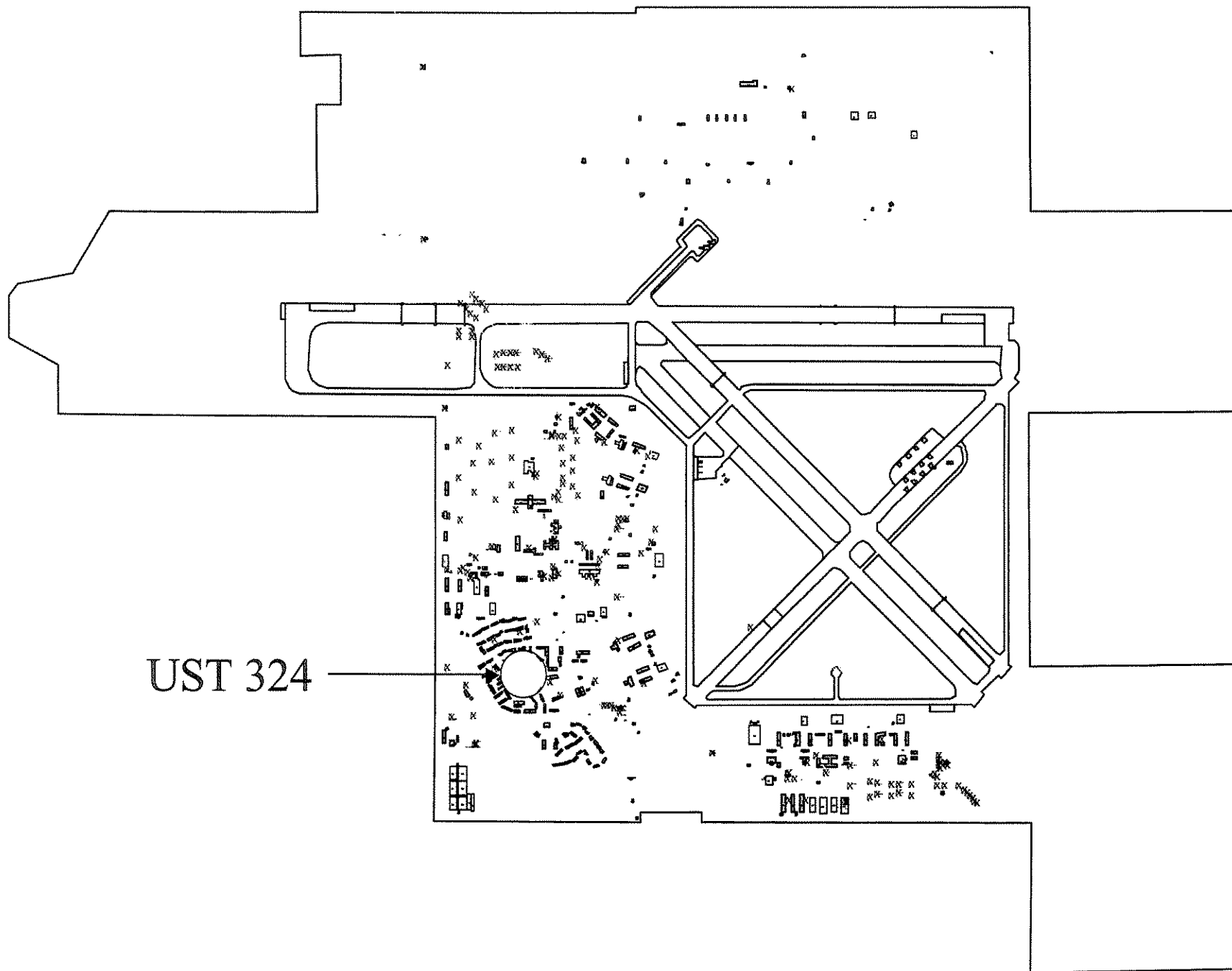


UST 324:

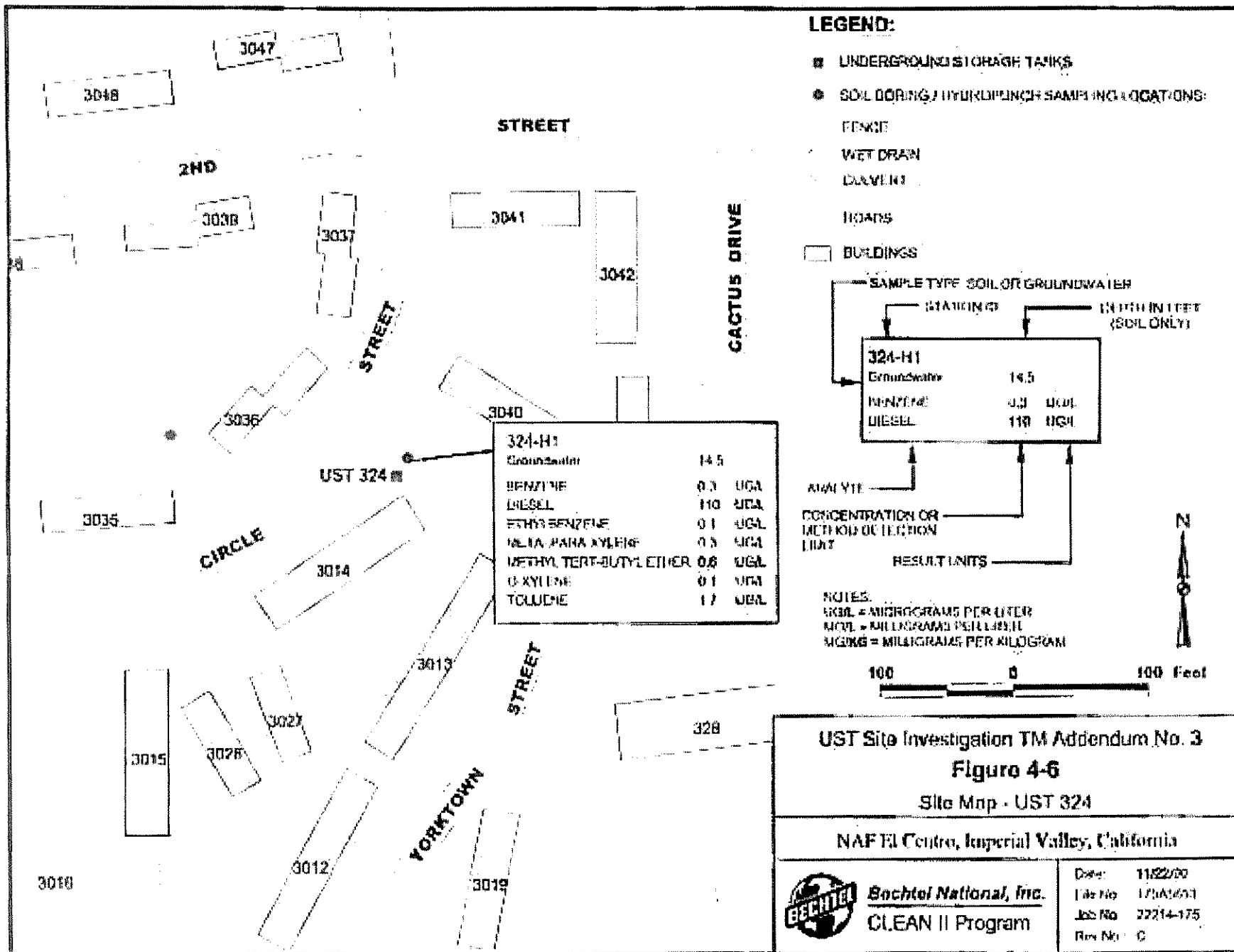
500 gallon concrete fuel oil UST

Removed - unknown

Recommended for Closure – BNI Tech Memo 3



UST 324



Analytical Results for UST Site 324

Sample Number	Location	Depth (feet bgs)	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	Total Xylenes	MTBE
Groundwater Results – BNI Field Investigation, April 2000 (µg/L)											
175HP98	324-H1	14.5 – 18	110	NA	0.3 J	1.7	0.1 J	0.3 J	0.1 J	NA	0.6
Historical Soil Results – OHM Remediation Services, Inc., January 1999 (mg/kg)											
920903-012	324-HA	8	13 U	13 U	0.0064 U	0.0064 U	0.0064 U	NA	NA	0.019 U	0.032 U

Acronyms/Abbreviations:

bgs – below ground surface
 BNI – Bechtel National, Inc.
 µg/L – micrograms per liter
 mg/kg – milligrams per kilogram
 MTBE – methyl-tert-butyl ether
 NA – not analyzed
 TPH – total petroleum hydrocarbons
 UST – underground storage tank

Data Qualifiers:

J – estimated value
 U – not detected

Source: BNI November 2000, Technical Memorandum 3

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-325
Site Address: Located in housing area on north side of Circle Street between Buildings 3035 and 3036, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: N/A

Date spill/leak reported to regulatory agency:	No spill leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tanks:	6737677.50000	1877463.62500

Dates for sample analysis: January 1999 and May 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no soil contamination was identified.

Estimated volume of contaminated soil left on site and concentration: Not applicable, no soil contamination identified.

Is groundwater contamination completely delineated? No groundwater contamination identified. Analytical results for a saturated soil sample were nondetect.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 6 feet below ground surface

Is groundwater or surface water impacted?

No. No evidence of contamination identified at this site.

Remedial action taken?

UST removed prior to 1997

Closure

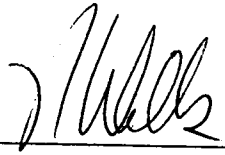
Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST removed prior to 1997

Site Closure: Due to the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment (all analytical results were nondetect), the recommendation for site closure is accepted and no further action is required at this site.

Signature

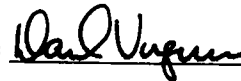


Date

1/25/05


N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Date

1/19/05

FOR
Liann P. Chavez, R.G. 
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-332 (F)
Site Address: Located north of Valley Forge Road near northeast corner of water tank perimeter fence, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000T 22430079

Date spill/leak reported to regulatory agency: 1995 (estimated)
Estimated date discharge/leak was discovered: 1995 (estimated)
How discharge/leak was discovered: Field investigation, 1995
Cause of discharge/leak: Leaking UST
Start date for active remediation: April 13, 1995
Completion date for active remediation: April 22, 1995

	Easting	Northing
Coordinates for tanks:	6737021.00000	1876764.75000

Dates for sample analysis: April 1995 and January 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: January 2000 MTBE analytical results were nondetect.

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: No contaminated soil left on site

Is groundwater contamination completely delineated? No groundwater contamination identified.
Groundwater was not encountered during soil remediation in 1995 and analytical results for a saturated soil sample collected in January 2000 were nondetect.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 7 feet below ground surface

Is groundwater or surface water impacted? No. No evidence of contamination identified at this site.

Remedial action taken? Yes. Soil at former UST location excavated in 1995.

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Soil at former UST location excavated in 1995.

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 12 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature N.R. Wells Date 6/7/05 Signature Liann Chavez Date 5-16-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

PS
Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

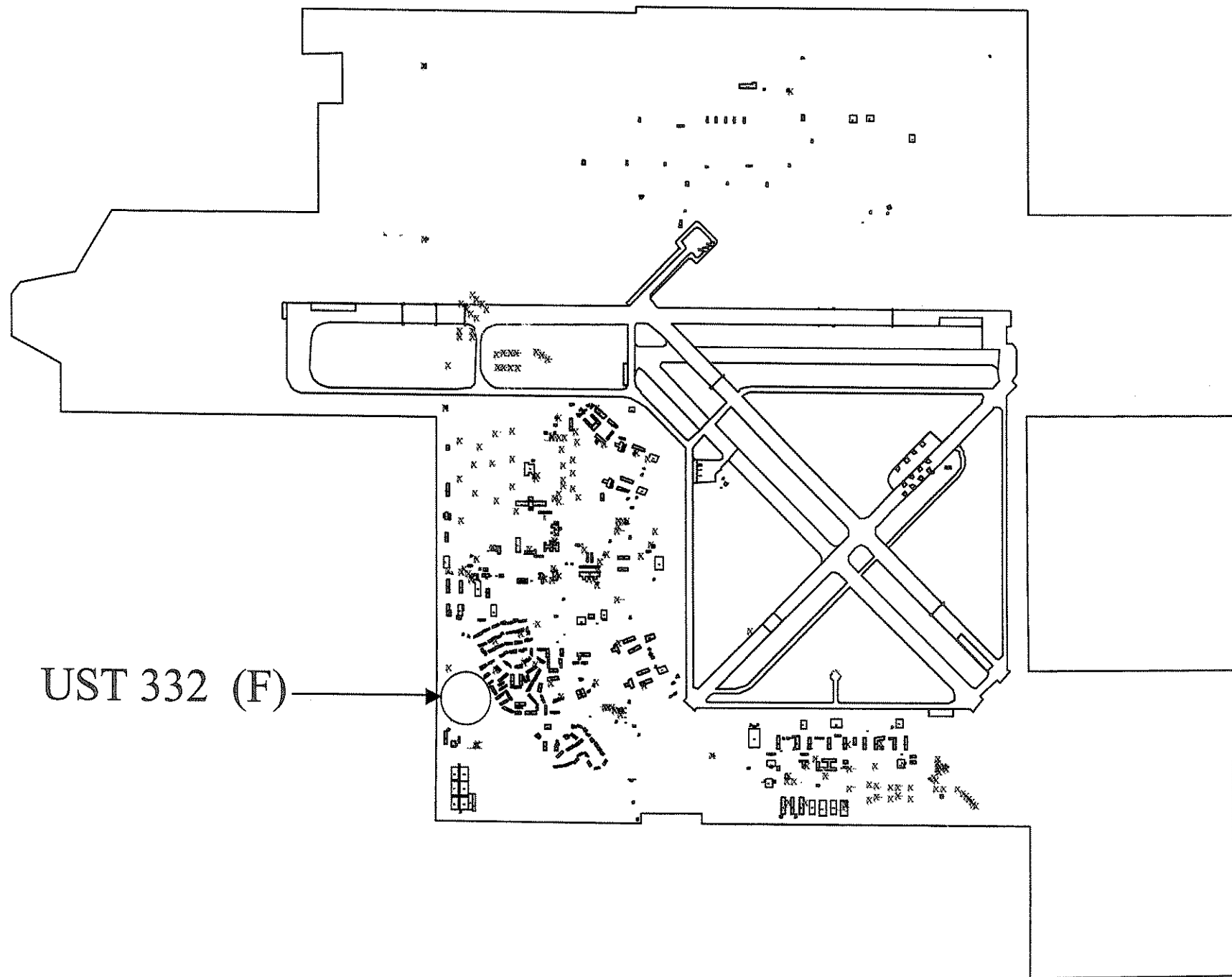


UST 332 (F)

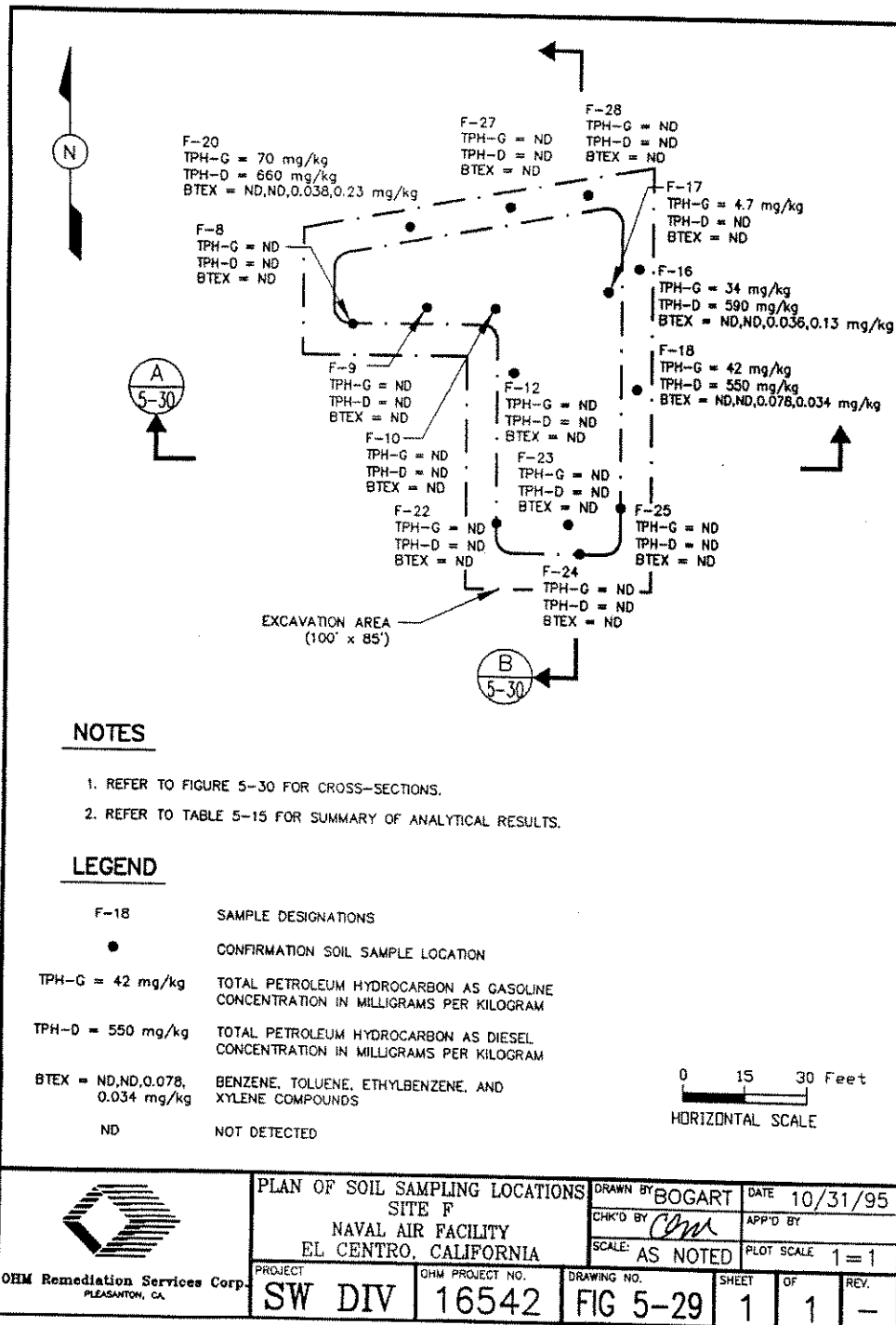
1,400 gallon concrete diesel UST

Removed 1993

Recommended for Closure – OHM 1995



RD 0:6:19:09 11/1/95 13:54:22 C:\PROJECTS\16542\16542035



OHM Remediation Services Corp.
PLEASANTON, CA

PLAN OF SOIL SAMPLING LOCATIONS
SITE F
NAVAL AIR FACILITY
EL CENTRO, CALIFORNIA

PROJECT
SW DIV

OHM PROJECT NO.
16542

DRAWING NO.
FIG 5-29

SHEET
1

OF
1

REV.
-

DRAWN BY BOGART DATE 10/31/95
CHK'D BY *CM* APP'D BY
SCALE: AS NOTED PLOT SCALE 1=1

**TABLE 5-15
SITE F ANALYTICAL RESULTS**

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
4/18/95	F-8/NW	12'	SOIL	ND	ND	ND	ND	ND	ND
4/18/95	F-9/B	12'	SOIL	ND	ND	ND	ND	ND	ND
4/18/95	F-10/B	12'	SOIL	ND	ND	ND	ND	ND	ND
4/18/95	F-12/B	12'	SOIL	ND	ND	ND	ND	ND	ND
4/18/95	F-16/EW	7'	SOIL	ND	ND	0.036	0.13	34	590
4/18/95	F-17/B	12'	SOIL	ND	ND	ND	ND	4.7	ND
4/18/95	F-18/EW	8'	SOIL	ND	ND	0.078	0.034	42	550
4/20/95	F-20/NW	9'	SOIL	ND	ND	0.038	0.23	70	660
4/21/95	F-22/WW	8'	SOIL	ND	ND	ND	ND	ND	ND
4/21/95	F-23/B	11'	SOIL	ND	ND	ND	ND	ND	ND
4/21/95	F-24/SW	8'	SOIL	ND	ND	ND	ND	ND	ND
4/21/95	F-25/EW	8'	SOIL	ND	ND	ND	ND	ND	ND
4/22/95	F-27/NW	8'	SOIL	ND	ND	ND	ND	ND	ND
4/22/95	F-28/NW	7'	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

NOTES:

NR: Not Reported
 ND: Not Detected
 WW: West Wall
 NW: North Wall
 SW: South Wall
 EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-337 (G) [Tanks E, N, W]
Site Address: Located on the north side of the bend in Valley Forge Road, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000722430080

Date spill/leak reported to regulatory agency: 1993 during UST removals (estimated)
Estimated date discharge/leak was discovered: 1993 during UST removals (estimated)
How discharge/leak was discovered: UST removals, 1993
Cause of discharge/leak: Leaking USTs
Start date for active remediation: April 12, 1995
Completion date for active remediation: April 24, 1995

	Easting	Northing
Coordinates for tank E:	6737061.50000	1876394.75000
Coordinates for tank N:	6737063.00000	1876421.75000
Coordinates for tank W:	6737041.00000	1876396.12500

Dates for sample analysis: April 1995

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tanks contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated?

Groundwater was not encountered during soil excavation to a depth of 20 feet below ground surface

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Greater than 20 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater was not encountered during remediation

Remedial action taken?

Yes. Soil at former UST locations excavated in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Soil at former UST locations excavated in 1995

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 20 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer



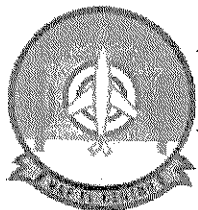
Liann P. Chavez, R.G.

Senior Engineering Geologist

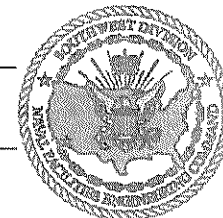
California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



UST 337(G) (E, N, W)

Three 1,400 gallon concrete diesel USTs

Removed 1993

Recommended for Closure – OHM 1995

USTs 337 (G) (E, N, W)

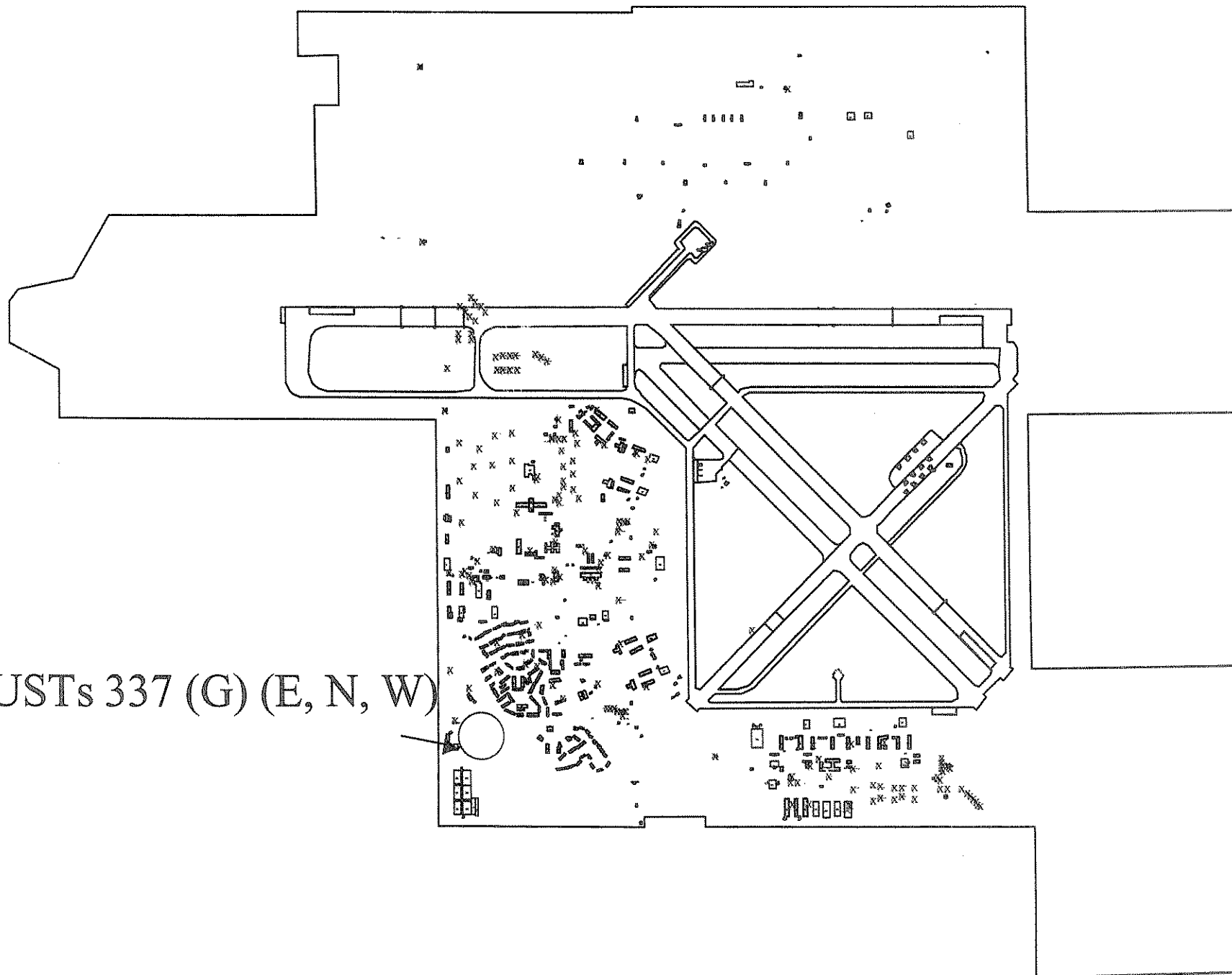


TABLE 5-16
SITE G ANALYTICAL RESULTS

EXCAVATION CONFIRMATION:

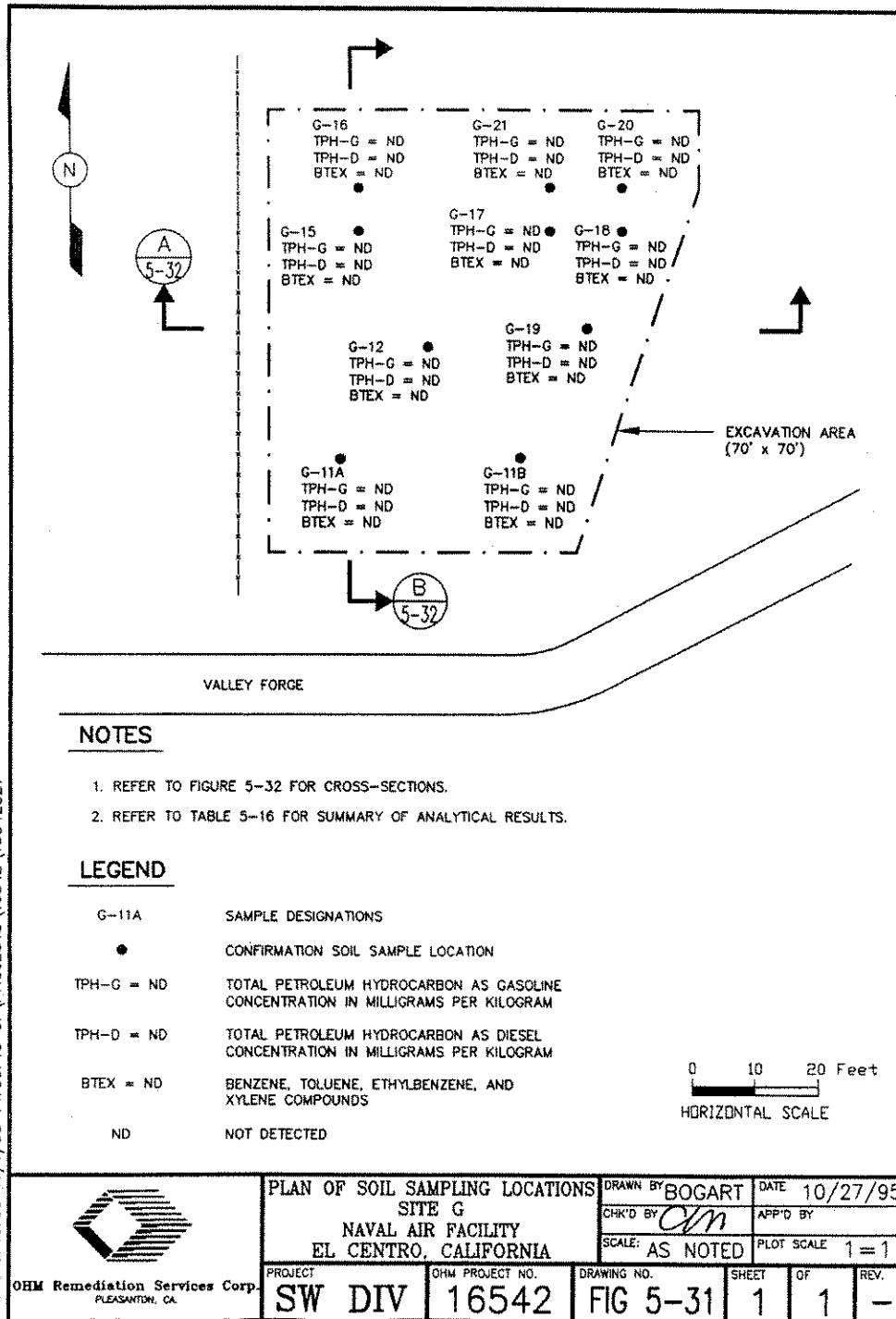
Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl- Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
4/13/95	G-11A/WW	13'	SOIL	ND	ND	ND	ND	ND	ND
4/17/95	G-11B/SW	10'	SOIL	ND	ND	ND	ND	ND	ND
4/13/95	G-12/B	15'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-15/B	20'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-16/NW	20'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-17/B	20'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-18/EW	20'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-19/EW	20'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-20/NW	20'	SOIL	ND	ND	ND	ND	ND	ND
4/24/95	G-21/NW	20'	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)				SOIL	1.4	1.9E3	6.9E2	9.9E2	100 1000

NOTES:

NR: Not Reported
 ND: Not Detected
 WW: West Wall
 NW: North Wall
 SW: South Wall
 EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

RO 0:04:50:09 11/1/95 14:09:49 C:\PROJECTS\16542\16542021



TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-359
Site Address: Beneath paved parking area on west side of the base chapel (Building 359 – near corner of Third and B Streets), Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DQ05 2243 0082

Date spill/leak reported to regulatory agency: 1999 (estimated)
Estimated date discharge/leak was discovered: 1999 (estimated)
How discharge/leak was discovered: Tank removal, February 1999
Cause of discharge/leak: Leaking UST
Start date for active remediation: February 1999
Completion date for active remediation: February 1999

	Easting	Northing
Coordinates for tanks:	6738067.00000	1878529.12500

Dates for sample analysis: February 1999 and April 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 14.5 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Remedial action taken?

Yes. UST and contaminated soil removed in February 1999.

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. UST and contaminated soil removed in February 1999.

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 13 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

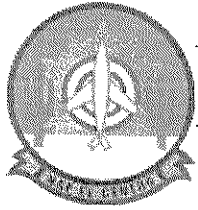
Liann Chavez

Date

5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



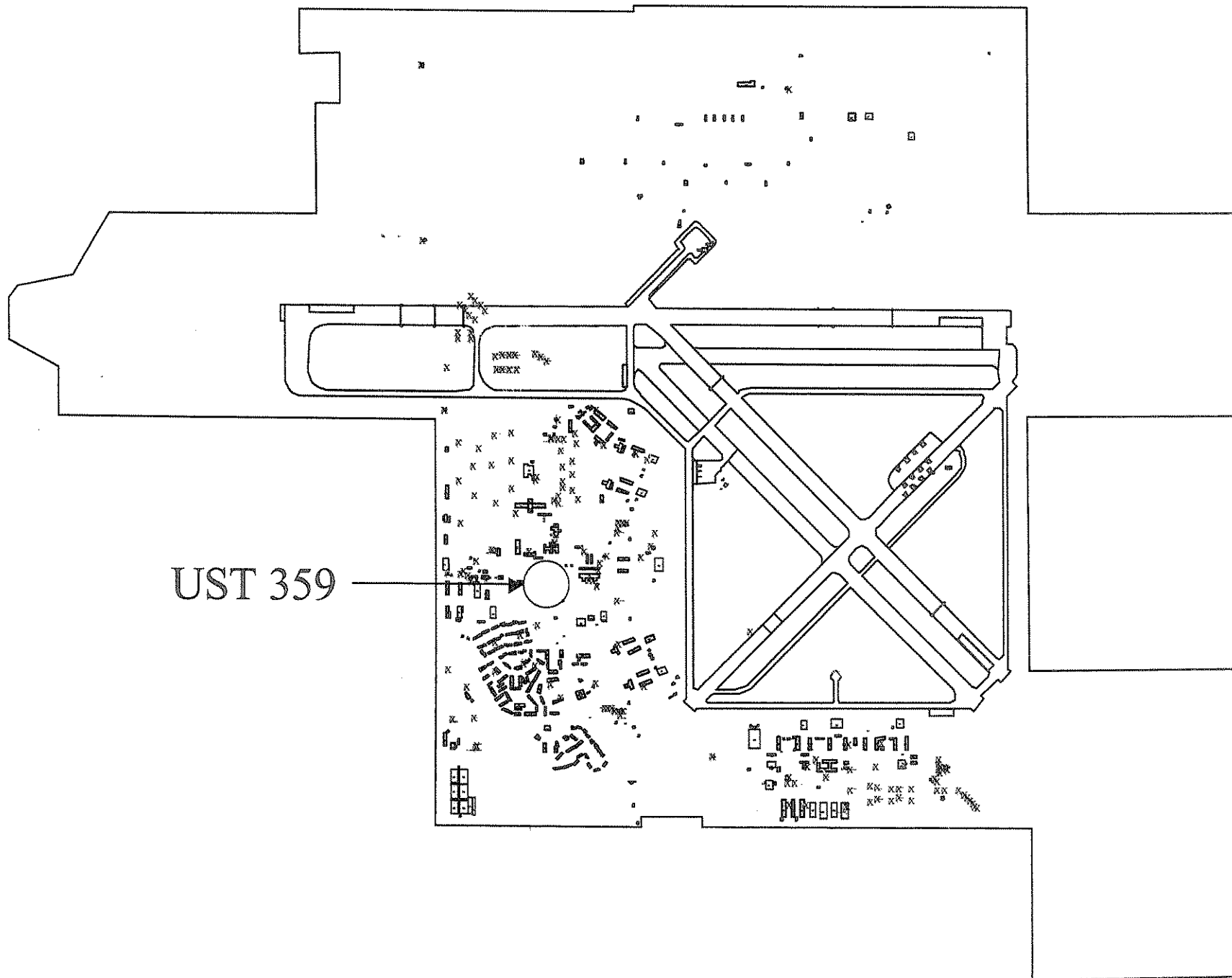
UST 359

1,500 gallon concrete fuel oil UST

Removed 1999

Recommended for Closure – BNI Tech Memo 3

UST 359



Analytical Results for UST Site 359

Sample Number	Location	Depth (feet bgs)	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	Total Xylenes	MTBE
Groundwater Results – BNI Field Investigation, April 2000 (µg/L)											
175HP95	359-H1	14.5 – 18	7,000	NA	0.2 J	0.8 U	0.3 J	0.3 J	0.2 J	NA	1.5
175HP96 (Dup)	359-H1	14.5 – 18	1,000	NA	0.2 J	0.9 U	1.2	0.6	0.4 J	NA	0.6
Historical Soil Sample Results – OHM Remediation Services, Inc., February 1999 (mg/kg)											
920903-041	359-EW	8	13 U	13 U	0.0065 U	0.003 J	0.0065 U	NA	NA	0.02 U	0.033 U
920903-042	359-SW	9	284	13 U	0.0064 U	0.0009 J	0.0064 U	NA	NA	0.019 U	0.032 U
920903-047	359-NW	8	13 U	13 U	0.0067 U	0.0067 U	0.0067 U	NA	NA	0.02 U	0.033 U
920903-048	359-NF	13.5	47	13 U	0.0064 U	0.0064 U	0.0064 U	NA	NA	0.019 U	0.032 U
920903-049	359-WW	10	13 U	13 U	0.0066 U	0.001 J	0.0066 U	NA	NA	0.02 U	0.033 U
920903-053	359-NWW	8	13 U	13 U	0.0066 U	0.0008 J	0.0066 U	NA	NA	0.02 U	0.033 U
920903-054	359-SF	13.5	13 U	13 U	0.0067 U	0.0067 U	0.0067 U	NA	NA	0.02 U	0.034 U
920903-055	359-SW	8	33	13 U	0.0065 U	0.0065 U	0.0065 U	NA	NA	0.02 U	0.033 U
920903-056	359-EW	9	13 U	13 U	0.0064 U	0.0064 U	0.0064 U	NA	NA	0.019 U	0.032 U

Acronyms/Abbreviations:

bgs – below ground surface
 BNI – Bechtel National, Inc.
 Dup – duplicate sample
 µg/L – micrograms per liter
 mg/kg – milligrams per kilogram
 MTBE – methyl-tert-butyl ether
 NA – not analyzed
 TPH – total petroleum hydrocarbons
 UST – underground storage tank

Data Qualifiers:

J – estimated value
 U – not detected

Source: BNI November 2000, Technical Memorandum 3

RECEIVED

FEB 06 2004

REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-422
Site Address: Located beneath the covered parking area southwest of Building 4001,
Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 71000T22430066

Date spill/leak reported to regulatory agency: 1992 (estimated)
Estimated date discharge/leak was discovered: 1992 (estimated)
How discharge/leak was discovered: Tank removal, 1992
Cause of discharge/leak: Leaking UST
Start date for active remediation: 1992
Completion date for active remediation: 1992

	Easting	Northing
Coordinates for tanks:	6737590.00000	1879417.12500

Dates for sample analysis: 1992 and January/February 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs:

RECEIVED

FEB 06 2004

REGION 7

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 15 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs
Remedial action taken?	Yes. UST and contaminated soil excavated in 1992.

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?	Yes. UST and contaminated soil excavated in 1992.
------------------------	---

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 15 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature  Date 1/10/05

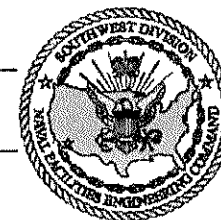
N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature  Date 5-28-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



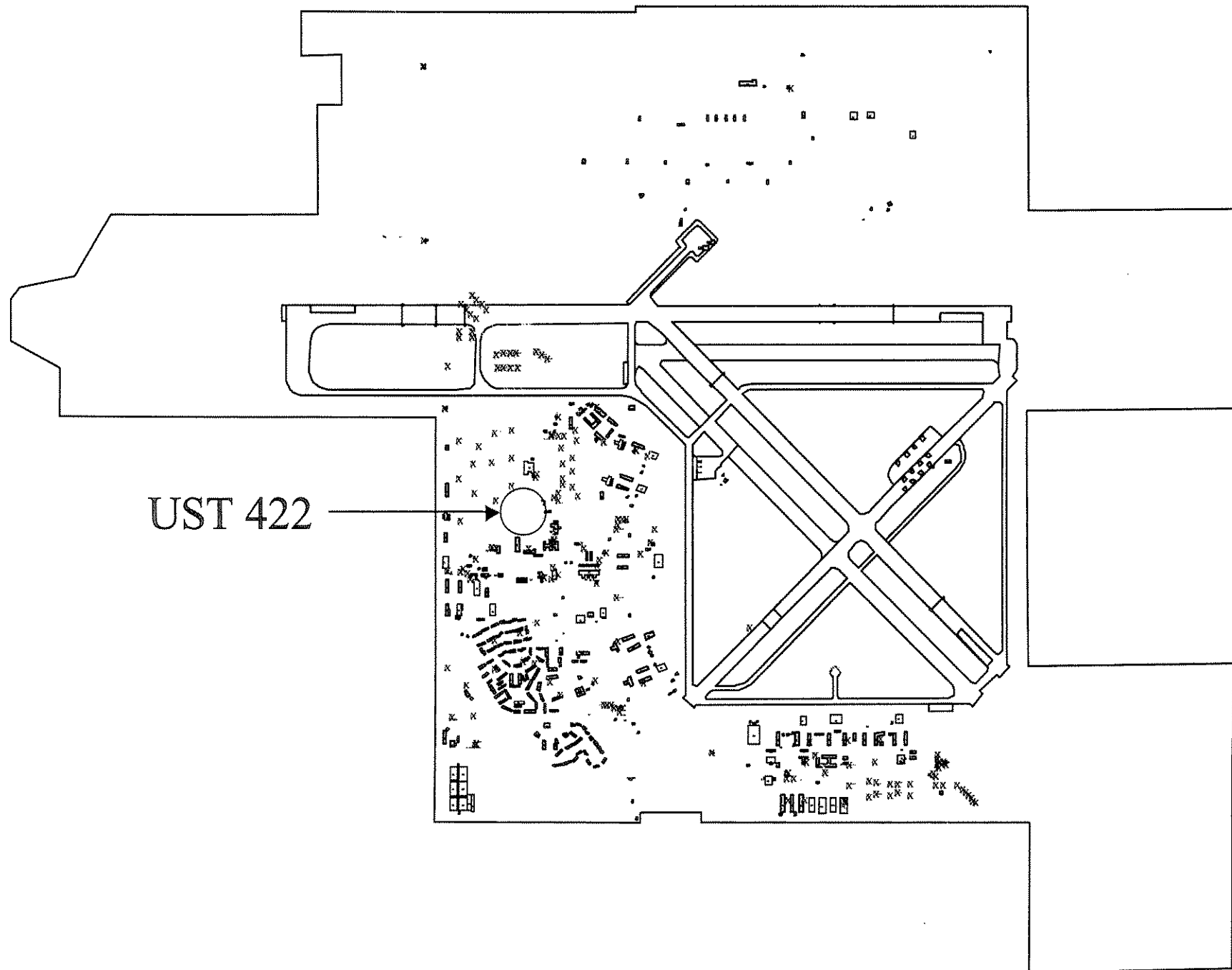
UST 422:

1000 gallon concrete UST – unknown contents

Removed 1992

Recommended for Closure – BNI Tech Memo 1

UST 422



SOUTH STREET

"C" STREET

GO-CART
TRACK 460

422-H1
Groundwater
TOLUENE 1.7 ug/l
TOTAL XYLENES 3 ug/l

422-S1
NO ANALYTES DETECTED AT
THIS LOCATION

422-H1

UST 422

422-S1

COVERED PARKING

PARKING AREA

APPROXIMATE GROUNDWATER
GRADIENT DIRECTION

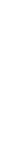
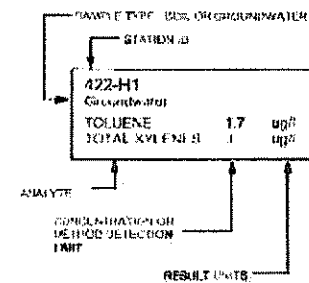
LEGEND

- UNDERGROUND STORAGE TANKS
- ▲ ABOVEGROUND STORAGE TANKS
- MONITORING WELL LOCATIONS
- ▲ DETECTION WELL LOCATIONS
- SAMPLING LOCATIONS
- H - HYDROPHONIC
- S - SOIL DRUMING
- NAF EL CENTRO BOUNDARY
- ▨ BUILDING
- ▬ ROADS
- ▬ ROWWAY
- ▬ FENCE
- ▬ DRIVE
- ▬ FIELDS
- ▬ DRAINAGE OR IRRIGATION CANAL
- ▬ MAJOR DRAIN
- ▬ DRAINAGE FLOW

NOTES:

ALL ANALYTICAL DATA PRESENTED ON THIS
FIGURE IS FROM CURRENT 1999 SITE
INVESTIGATIONS

ALL BSL AND GROUNDWATER SAMPLES
COLLECTED DURING THE CURRENT INVESTIGATIONS
WERE ANALYZED FOR MTBE



30 0 30 Feet

Final Technical Memorandum, UST SI
Figure 4-22
Site 422 - Site Map

NAF El Centro, Imperial County, California



Bechtel National, Inc.
CLEAN II Program

Date: 02/20/00
File No.: 1781 AFRD
Job No.: 02214 175
Rev No.: 0

Analytical Results for UST 422

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene ^c	Total Xylenes ^c	MTBE ^c	Organolead ^d
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S053	422-S1	6	NA	11 U	NA	0.054 U	0.11 U	0.11 U	0.11 U	1.1 U	NA
175S054	422-S1	10.4	NA	13 U	NA	0.063 U	0.13 U	0.13 U	0.13 U	1.3 U	NA
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP22	422-H1	19 – 23 ^e	NA	0.5 U ^f	NA	0.5 U	1.7	1.0 U	3.0	10 U	NA
Historical Data, Soil Results – WCC, UST Removal Report, 1992 (mg/kg)^g											
Concrete 1		8									
Concrete 2		10									
Concrete 3		8									
Concrete 4		12									
Concrete 5		15									
Concrete 6		16		5.0 U		0.025 U	0.025 U	0.025 U	0.05 U		
Concrete 7		15									
Concrete 8		15		210		0.025 U	0.025 U	0.14	0.34		
Concrete 9		15		98		0.025 U	0.025 U	0.039	0.16		
Concrete 10		15									
Concrete 11		15		29		0.025 U	0.025 U	0.025 U	0.05 U		
Groundwater Results – WCC, UST Removal Report, 1992 (µg/L)^g											
Concrete Tank	Excavation	15		3,400		0.5 U	0.5 U	0.5 U	1.0 U		

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021-B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e HydroPunch screened interval
- ^f diesel results for groundwater reported in milligrams per liter
- ^g collected during UST removal

Acronyms/Abbreviations:

µg/L – micrograms per liter (parts per billion)
bgs – below ground surface
BNI – Bechtel National, Inc.
mg/kg – milligrams per kilograms (parts per million)
MTBE – methyl-tert-butyl ether
NA – not analyzed

TPH – total petroleum hydrocarbons
TRPH – total recoverable petroleum hydrocarbons
U – not detected above the referenced detection limit
UST – underground storage tank
WCC – Woodward-Clyde Consultants
Source: BNI November 2000, Technical Memorandum 1

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-427
Site Address: Located in an open dirt area on the north side of South Street, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	Tank removed in 1992
Completion date for active remediation:	Tank removed in 1992

	Easting	Northing
Coordinates for tanks:	6738144.50000	1879644.37500

Dates for sample analysis: 1992 and January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no soil contamination was identified.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Analytical results for MTBE are below the tap water PRG and drinking water MCL

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 14 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for MTBE are below the tap water PRG and drinking water MCL

Remedial action taken?

Yes. UST was removed in 1992

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. UST was removed in 1992

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature

Liann P. Chavez Date 5-17-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



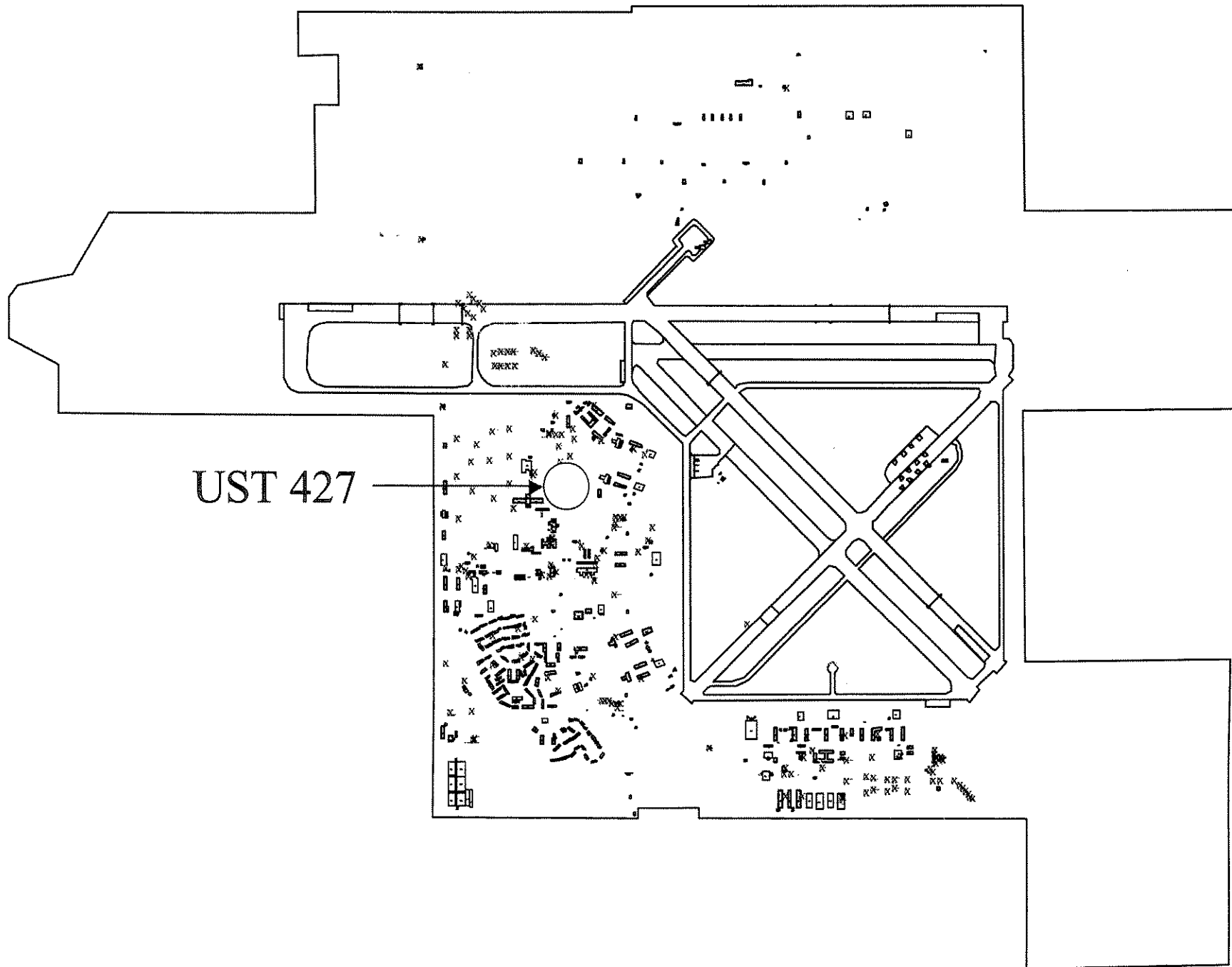
UST 427:

550 gallon steel diesel UST

Removed 1992

Recommended for Closure – BNI Tech Memo 2

UST 427



LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORINGS / HYDRO-PUNCH SAMPLING LOCATIONS
- /// ROADS
- BUILDINGS

427-S1
NO ANALYTES DETECTED
AT THIS LOCATION

UST
427

425-S1
UST
425

4002

4006

4007

SAMPLE TYPE	SOIL OR GROUNDWATER
STATION ID	DEPTH IN FEET (SOIL ONLY)
PIPE LINE NORTH-S1	
Groundwater	13.5
TOLUENE	0.0 UGL
ANALYTE	
CONCENTRATION OR METHOD DETECTION LIMIT	RESULT UNITS

NOTES
UGL = MICROGRAMS PER LITER
MGL = MILLIGRAMS PER LITER
MGL = MILLIGRAMS PER KILOGRAM



50 0 50 Feet

UST Investigation TM Addendum

Figure 4-18

Site Map - UST 427

NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
CLEAN II Program

Date 11/22/90
File No 175L5189
Job No 22214-175
Rev No C

Analytical Results for Underground Storage Tank 427

Sample Number	Location	Depth (feet bgs)	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)								
175S099	427-S1	6.5 – 7	NA	NA	NA	NA	NA	110 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)								
175HP54	427-S1	12.5 – 16	NA	NA	NA	NA	NA	0.5 U
<i>175HP55*</i>	<i>427-S1</i>	<i>12.5 – 16</i>	NA	NA	NA	NA	NA	<i>0.5 U</i>
Historical Data, Soil Results – Woodward-Clyde Consultants, UST Removal Report, 1992 (mg/kg)								
BEQ427-1	West end of tank	8	5.0 U	0.025 U	0.025 U	0.025 U	0.050 U	NA
BEQ427-2	East end of tank	8						
BEQ427-3	East end of tank	10	5.0 U	0.025 U	0.025 U	0.025 U	0.050 U	NA

Note:

* italicized results indicate a field duplicate

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

MTBE – methyl-tert-butyl ether

NA – not analyzed

TPH – total petroleum hydrocarbons

UST – underground storage tank

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

RECEIVED
FEB 06 2004
REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-432
Site Address: Located in an open area on west side of B Street and north of South Street, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430077

Date spill/leak reported to regulatory agency: December 1994 (estimated)
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field Investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 6, 1994
Completion date for active remediation: January 17, 1995

	Easting	Northing
Coordinates for tanks:	6738209.50000	1879830.37500

Dates for sample analysis: December 1994/January 1995

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Groundwater analytical results were all nondetect.

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 20 feet below ground surface
Is groundwater or surface water impacted?	No. Groundwater analytical results were nondetect.
Remedial action taken?	Yes. Soil at former UST location excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Soil at former UST location excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 11 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature N.R. Wells Date 18 Apr 05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature Liam P. Chavez Date 4-6-05

Liam P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

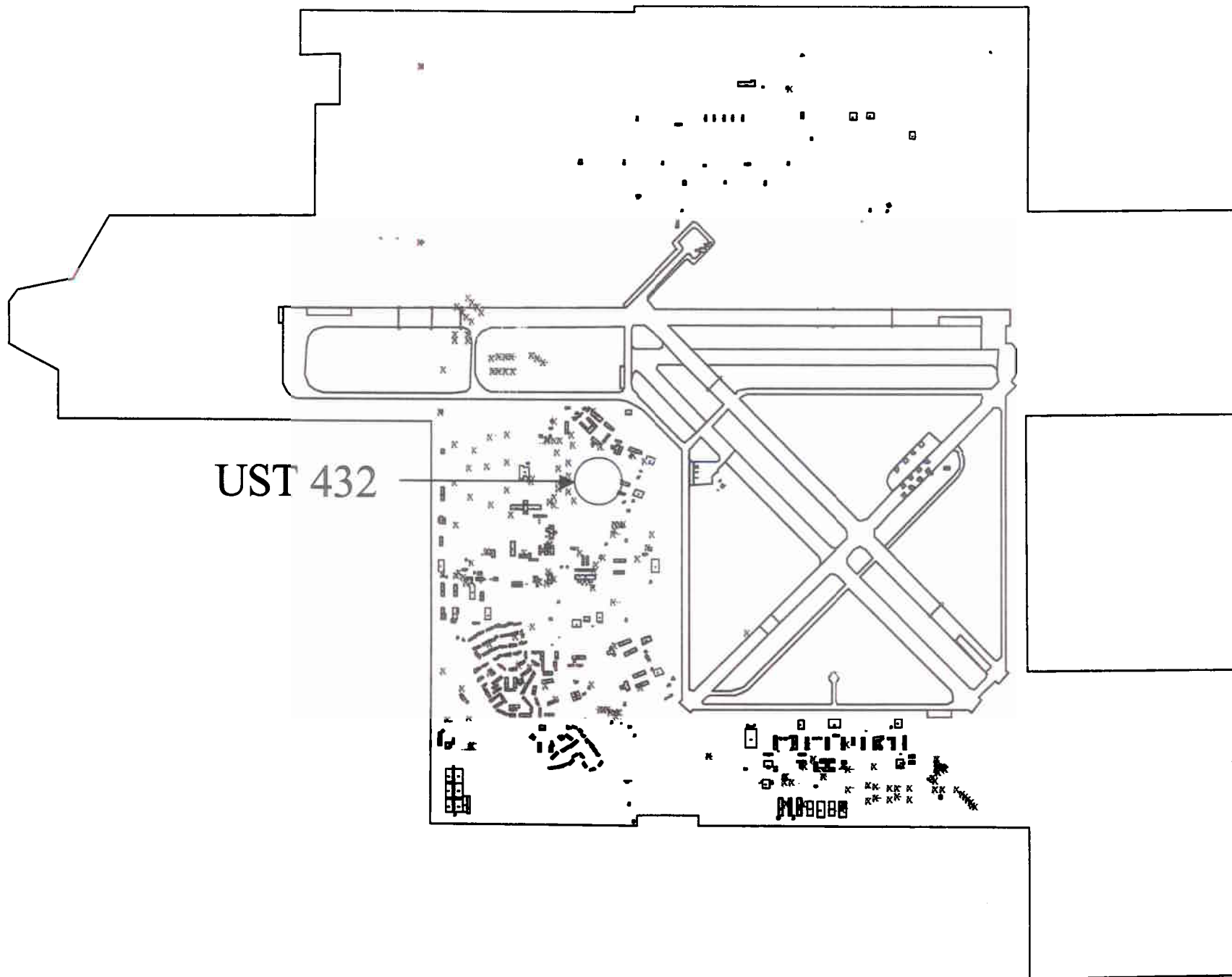


UST 432:

500 gallon concrete diesel UST

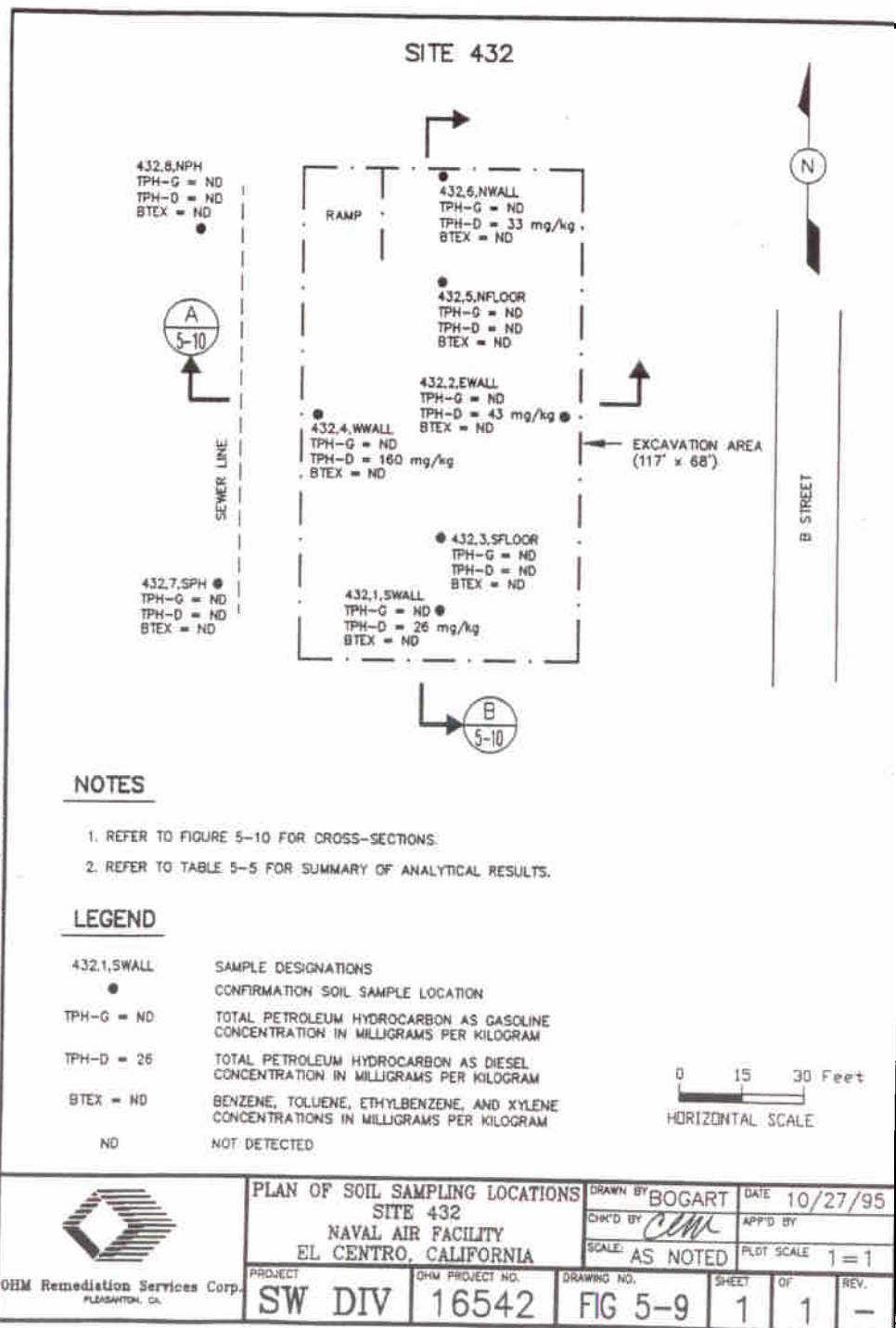
Removed 1994

Recommended for Closure – OHM 1995



UST 432

RD 0:20:04:58 11/8/95 15:24:37 C:\PROJECTS\16542\16542023



**TABLE 5-5
SITE 432 ANALYTICAL RESULTS**

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1/18/95	432,1,SWALL/SW	15'	SOIL	ND	ND	ND	ND	ND	26
1/18/95	432,2,EWALL/EW	15'	SOIL	ND	ND	ND	ND	ND	43
1/18/95	432,3,SFLOOR/B	16'	SOIL	ND	ND	ND	ND	ND	ND
1/18/95	432,4,WWALL/WW	15'	SOIL	ND	ND	ND	ND	ND	160
1/18/95	432,5,NFLOOR/B	16'	SOIL	ND	ND	ND	ND	ND	ND
1/18/95	432,6,NWALL/NW	15'	SOIL	ND	ND	ND	ND	ND	33
1/19/95	432,7,SPH	17'	SOIL	ND	ND	ND	ND	ND	ND
1/19/95	432,8,NPH	17'	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/30/95	432-BF	-	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

PERCHED WATER:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1/23/95	432-W	-	WATER	ND	ND	ND	ND	ND	ND
1/30/95	432-W	-	WATER	ND	ND	ND	ND	ND	ND
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported
 ND: Not Detected
 WW: West Wall
 NW: North Wall
 SW: South Wall
 EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-433
Site Address: Located near the southeast corner of Building 433, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	No discharge/leak identified
How discharge/leak was discovered:	No discharge/leak identified
Cause of discharge/leak:	No discharge/leak identified
Start date for active remediation:	UST was removed in 1995
Completion date for active remediation:	UST was removed in 1995

	Easting	Northing
Coordinates for tanks:	6737853.50000	1879850.37500

Dates for sample analysis: 1995 and January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no evidence of soil contamination was identified.

Estimated volume of contaminated soil left on site and concentration: Not applicable. No soil contamination identified.

Is groundwater contamination completely delineated? Analytical result for MTBE was below tap water PRG and drinking water MCL.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12.5 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical result for MTBE was below tap water PRG and drinking water MCL

Remedial action taken?

UST was removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

UST was removed in 1995

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

4/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature

Liann P Chavez

Date 5-17-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

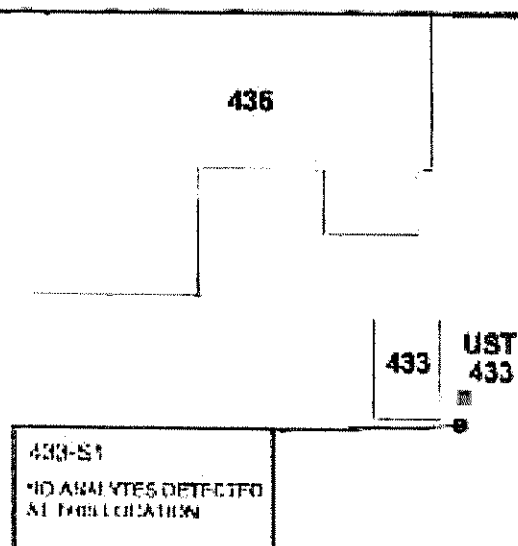


UST 433:

1000 gallon steel diesel UST

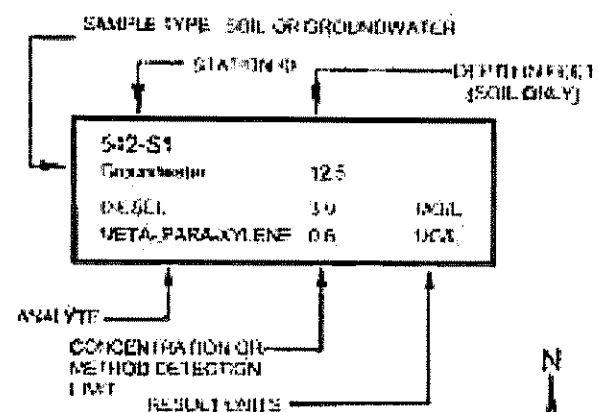
Removed 1995

Recommended for Closure – BNI Tech Memo 2



LEGEND:

- UNDERGROUND STORAGE TANKS
- HIGH RESISTANCE / INTERFERENCE SAMPLE INDICATORS
- OFFICE
- WET DRAIN
- CULVERT
- ROADS
- BUILDINGS



NOTES:
 MDL = MICROGRAMS PER LITER
 MDL = MILLIGRAMS PER LITER
 MDL = MILLIGRAMS PER KILOGRAM

60 0 60 Feet

UST Investigation TM Addendum

Figure 4-22

Site Map - UST 433

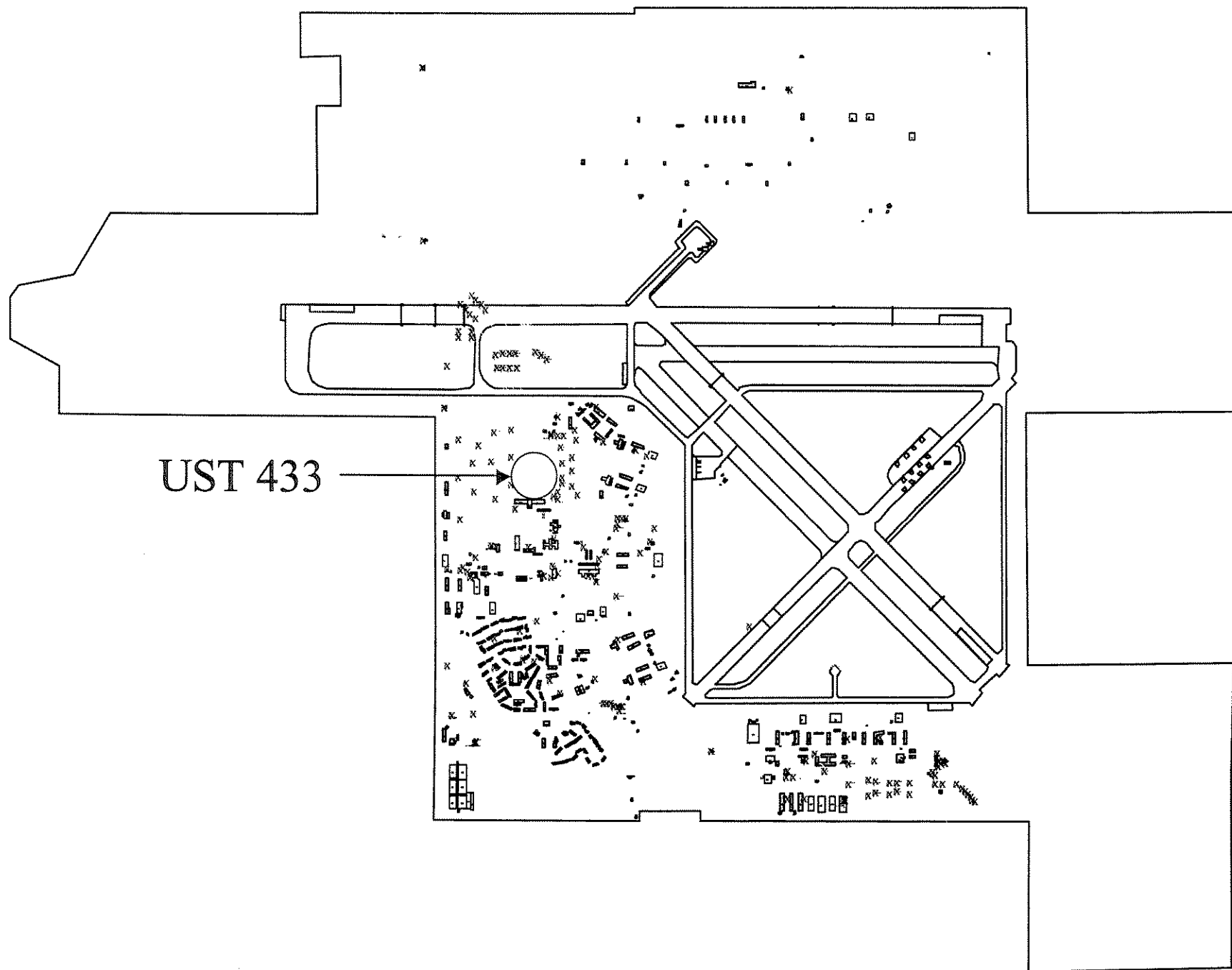
NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
 CLEAN II Program

DATE: 11/22/00
 FILE NO.: 175L5111
 JOB NO.: 22214-175
 REV NO.: C

4004



UST 433

Analytical Results for Underground Storage Tank 433

Sample Number	Location	Depth (feet bgs)	TRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)								
175S100	433-S1	7.6 – 8	NA	NA	NA	NA	NA	110 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)								
175HP56	433-S1	12.5 – 16	NA	NA	NA	NA	NA	5 U
Historical Data, Soil Results – Environmental Chemical Corp., UST Removal/Replacement, 1995 (mg/kg)								
433 EXC	Tank pit bottom	10.5	20 U	0.005 U	0.005 U	0.005 U	0.005 U	NA
433 Pipe trench	Pipeline	Unknown	20 U	0.005 U	0.005 U	0.005 U	0.005 U	NA

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

MTBE – methyl-tert-butyl ether

NA – not analyzed

TRPH – total recoverable petroleum hydrocarbons

UST – underground storage tank

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

RECEIVED
FEB 06 2003
REGION 1

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-434
Site Address: Located in an open area between D and West Streets north of West Place, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430067

Date spill/leak reported to regulatory agency: December 1994 (estimated)
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 5, 1994
Completion date for active remediation: January 30, 1995

	Easting	Northing
Coordinates for tanks:	6737021.50000	1880016.00000

Dates for sample analysis: December 1994/January 1995

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 20 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 12 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

4/10/05

Signature



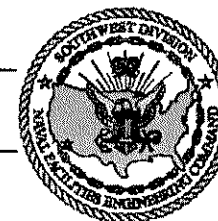
Liann P. Chavez Date 10-25-04

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



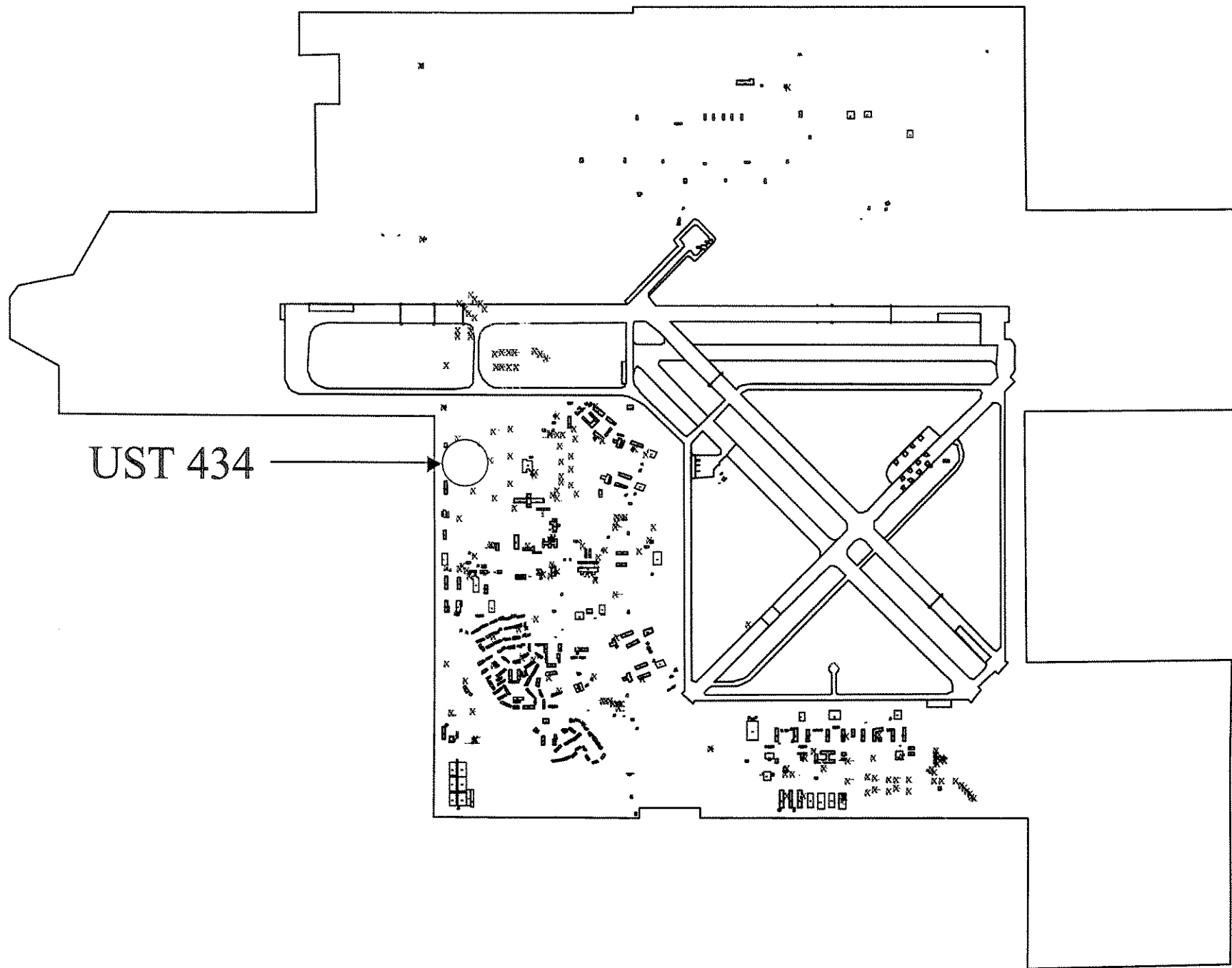
UST 434:

500 gallon concrete diesel UST

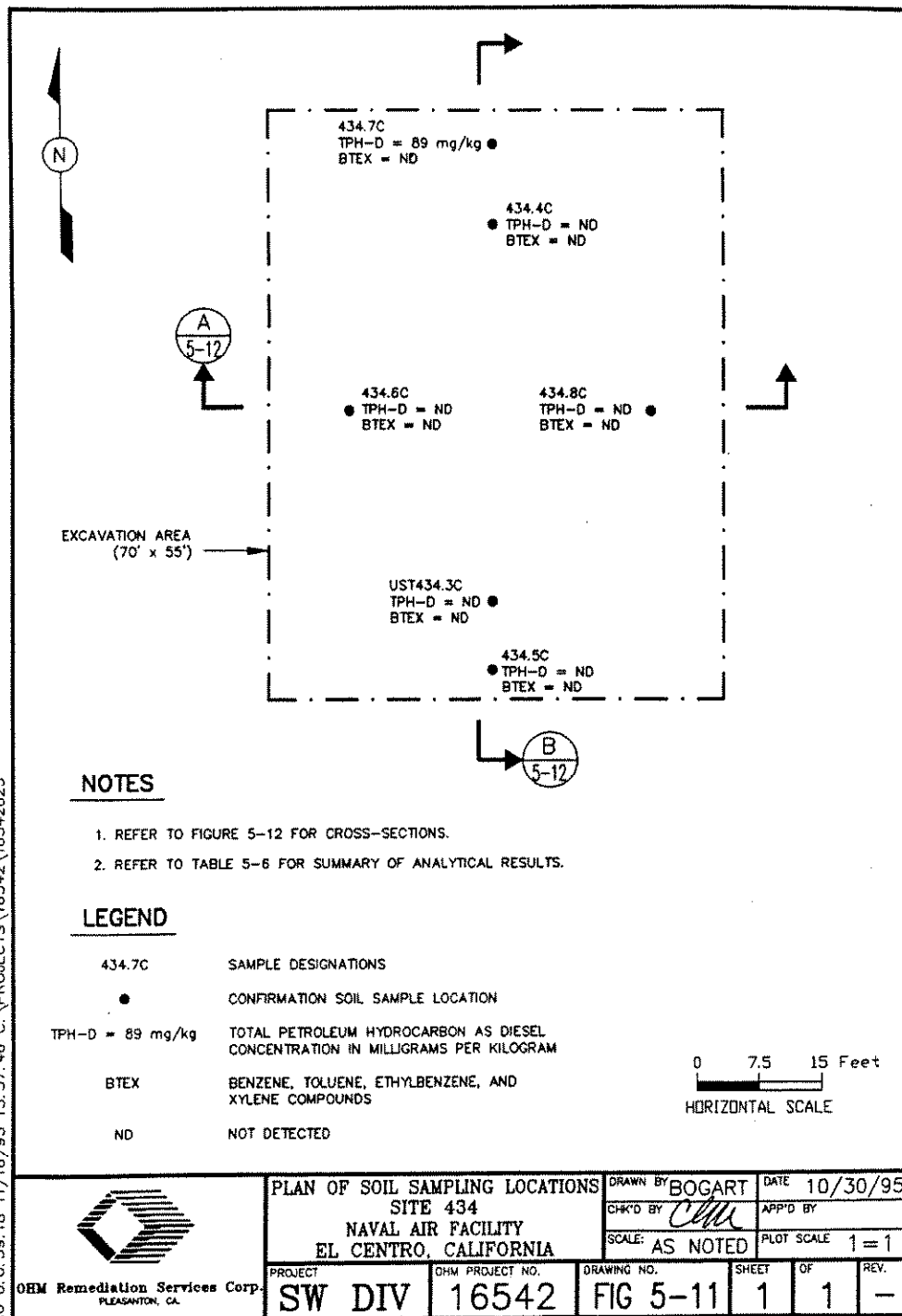
Removed 1994

Recommended for Closure – OHM 1995

UST 434



RO 0: 59:18 11/16/95 15:37:46 C:\PROJECTS\16542\16542025



**TABLE 5-6
SITE 434 ANALYTICAL RESULTS**

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/6/94	UST434.3C/B	21'	SOIL	ND	ND	ND	ND	NR	ND
12/6/94	434.4C/B	21'	SOIL	ND	ND	ND	ND	NR	ND
12/6/94	434.5C/SW	20'	SOIL	ND	ND	ND	ND	NR	ND
12/6/94	434.6C/WW	20'	SOIL	ND	ND	ND	ND	NR	ND
12/6/94	434.7C/NW	20'	SOIL	ND	ND	ND	ND	NR	89
12/6/94	434.8C/EW	20'	SOIL	ND	ND	ND	ND	NR	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/30/94	434-BF	-	SOIL	ND	ND	ND	ND	ND	ND
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

PERCHED WATER:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
12/22/94	434-W	20'	WATER	ND	ND	ND	ND	ND	NR
1/17/95	434-W-2	20'	WATER	NR	NR	NR	NR	NR	ND
1/9/95	434-W005	20'	WATER	NR	NR	NR	NR	NR	0.470
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported ND: Not Detected WW: West Wall
 NW: North Wall SW: South Wall EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-436
Site Address: Located between the southeast corner of Building 436 and Center Street,
Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 71000T22430068

Date spill/leak reported to regulatory agency: December 1994 (estimated)
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 12, 1994
Completion date for active remediation: December 23, 1994

	Easting	Northing
Coordinates for tank:	6737875.00000	1879889.75000

Dates for sample analysis: December 1994/January, 1995

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 13 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 12 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

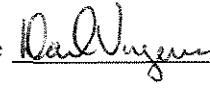
Signature



Date

4/10/05

Signature



Date

12/1/01

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



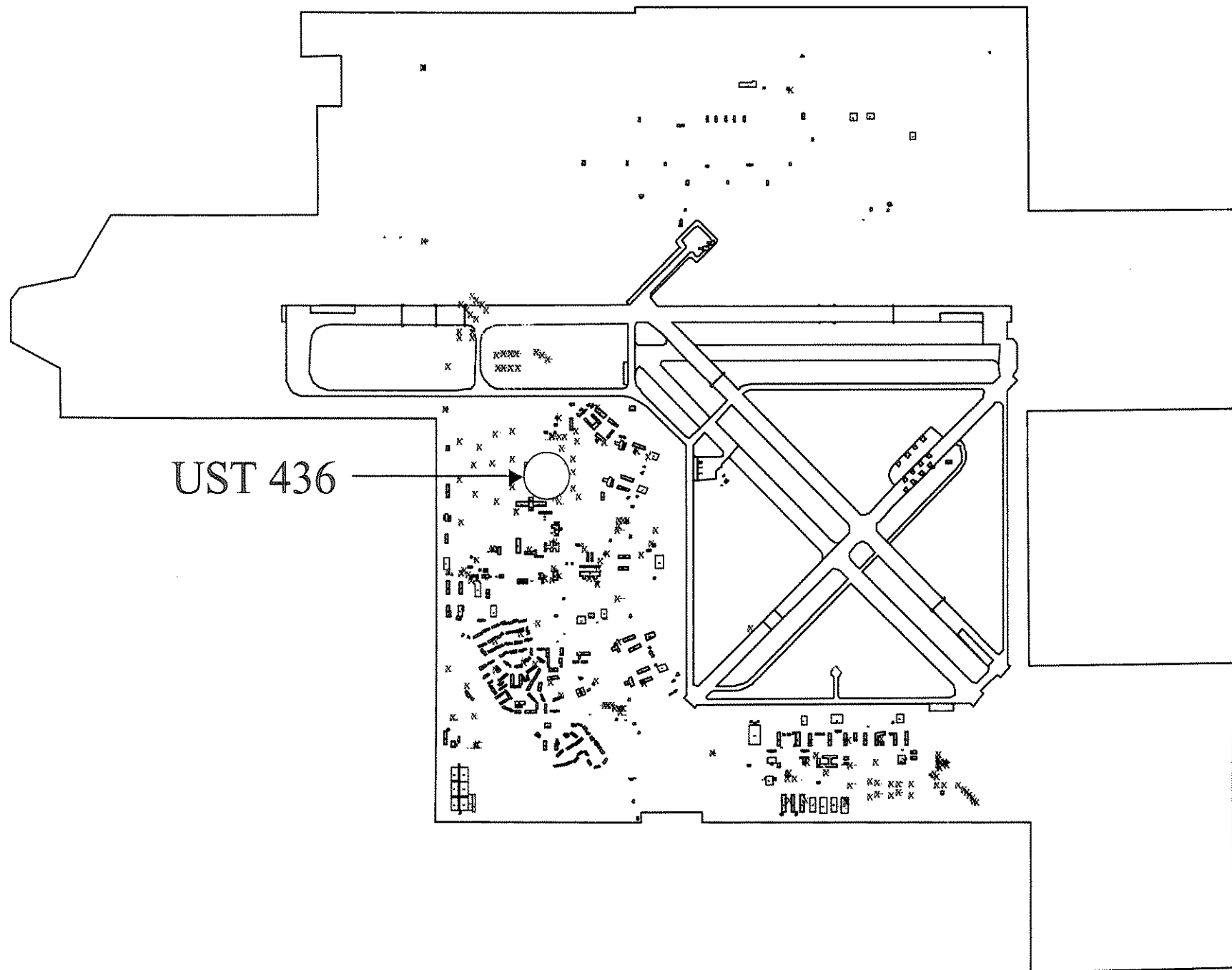
UST 436:

1000 gallon concrete diesel UST

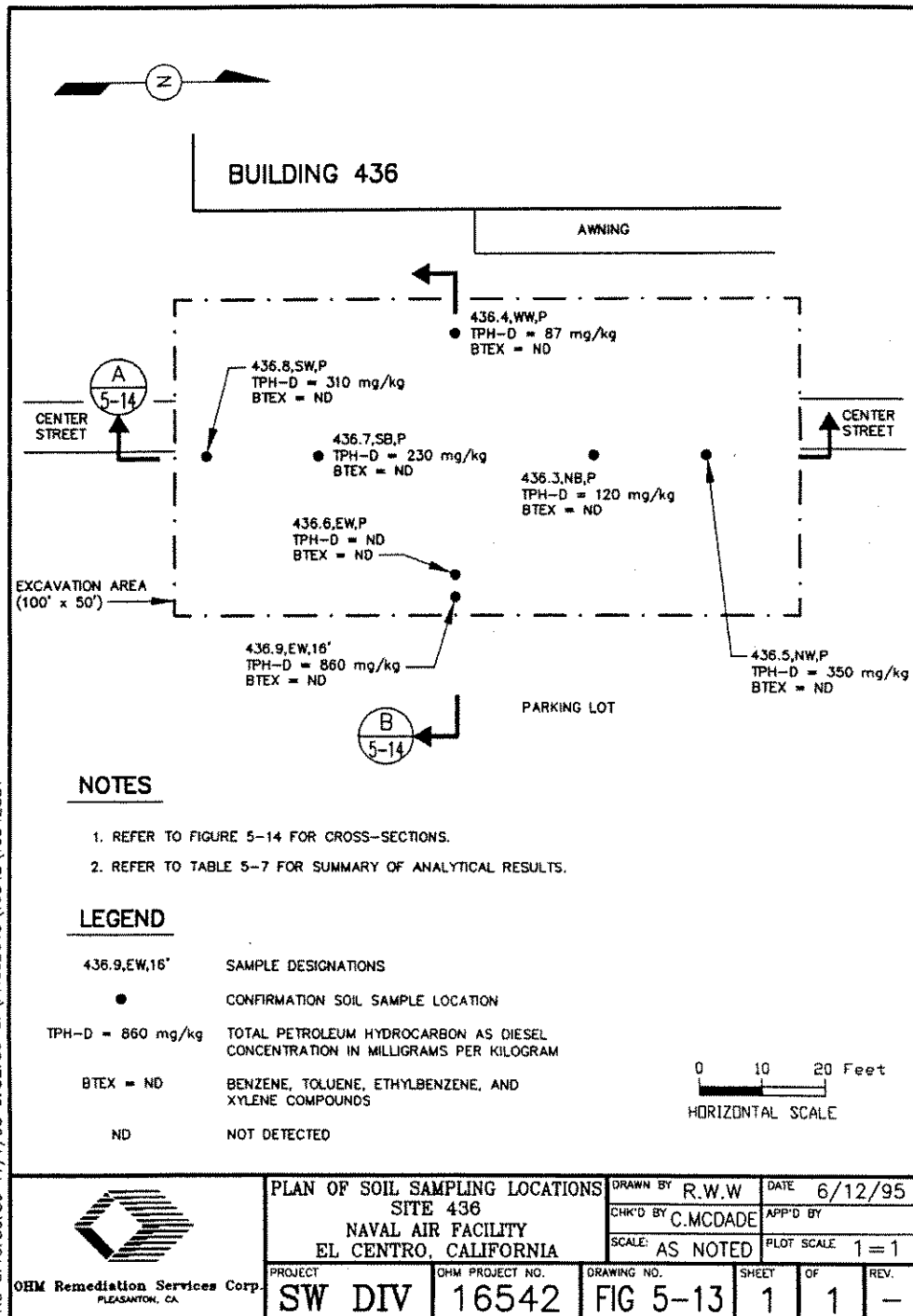
Removed 1994

Recommended for Closure – OHM 1995

UST 436



R0 0:10:50.36 11/1/95 9:32:59 C:\PROJECTS\16542\16542031



**TABLE 5-7
SITE 436 ANALYTICAL RESULTS**

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/13/94	436.2,P,14/WW	14'	SOIL	ND	ND	ND	ND	NR	ND
12/13/94	436.3,NB,P/B	19'	SOIL	ND	ND	ND	ND	NR	120
12/13/94	436.4,WW,P/WW	18'	SOIL	ND	ND	ND	ND	NR	87
12/13/94	436.5,NW,P/NW	18'	SOIL	ND	ND	ND	ND	NR	350
12/13/94	436.6,EW,P/EW	18'	SOIL	ND	ND	ND	ND	NR	ND
12/13/94	436.7,SB,P/B	19'	SOIL	ND	ND	ND	ND	NR	230
12/13/94	436.8,SW,P/SW	18'	SOIL	ND	ND	ND	ND	NR	310
12/14/94	436.9,EW,16/EW	16'	SOIL	ND	ND	ND	ND	NR	860
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
12/27/94	Backfill, 436-A	-	SOIL	ND	ND	ND	ND	NR	43
12/27/94	Backfill, 436-B	-	SOIL	ND	ND	ND	ND	NR	ND
12/27/94	Backfill	-	SOIL	ND	ND	ND	ND	NR	120
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

PERCHED WATER:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1/9/95	436-W, 003	-	WATER	NR	NR	NR	NR	NR	2.9
1/30/95	436-W	-	WATER	ND	ND	ND	ND	ND	NR
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported ND: Not Detected WW: West Wall
 NW: North Wall SW: South Wall EW: East Wall
 B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-437
Site Address: Located in an open area on the west side of B Street midway between South and North Streets, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430069

Date spill/leak reported to regulatory agency: December 1994 (estimated)
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 7, 1994
Completion date for active remediation: March 2, 1995

	Easting	Northing
Coordinates for tank:	6738209.50000	1880006.87500

Dates for sample analysis: December 1994 and January/February 1995

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

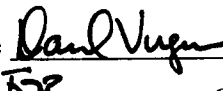
Signature



Date

1/25/05

Signature



Date

1/19/05

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region

RECEIVED

1/25/05

1/25/05

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-439
Site Address: Located in an open area just west of the corner of North and West Streets, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000T22430070

Date spill/leak reported to regulatory agency: December 1994 (estimated)
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 1, 1994
Completion date for active remediation: February 27, 1995

	Easting	Northing
Coordinates for tanks:	6737100.50000	1880237.00000

Dates for sample analysis: December 1994 and January/February 1995

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature




Date

1/25/05


N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Date

1/19/05

Liann P. Chavez, R.G. 
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-442
Site Address: Located in an open dirt area west of D Street, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tanks:	6736841.00000	1880316.00000

Dates for sample analysis: January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. No evidence of a former UST or soil contamination identified at this location.

Estimated volume of contaminated soil left on site and concentration: None. No soil contamination identified at this location.

Is groundwater contamination completely delineated? Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 14.5 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

No. Investigations found no evidence of a former UST or contaminated soil at this location

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

No. Investigations found no evidence of a former UST or contaminated soil at this location

Site Closure: Due to the absence of contaminants in soil or groundwater reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

4/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



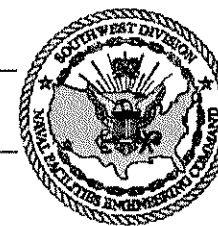
Date

5-17-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

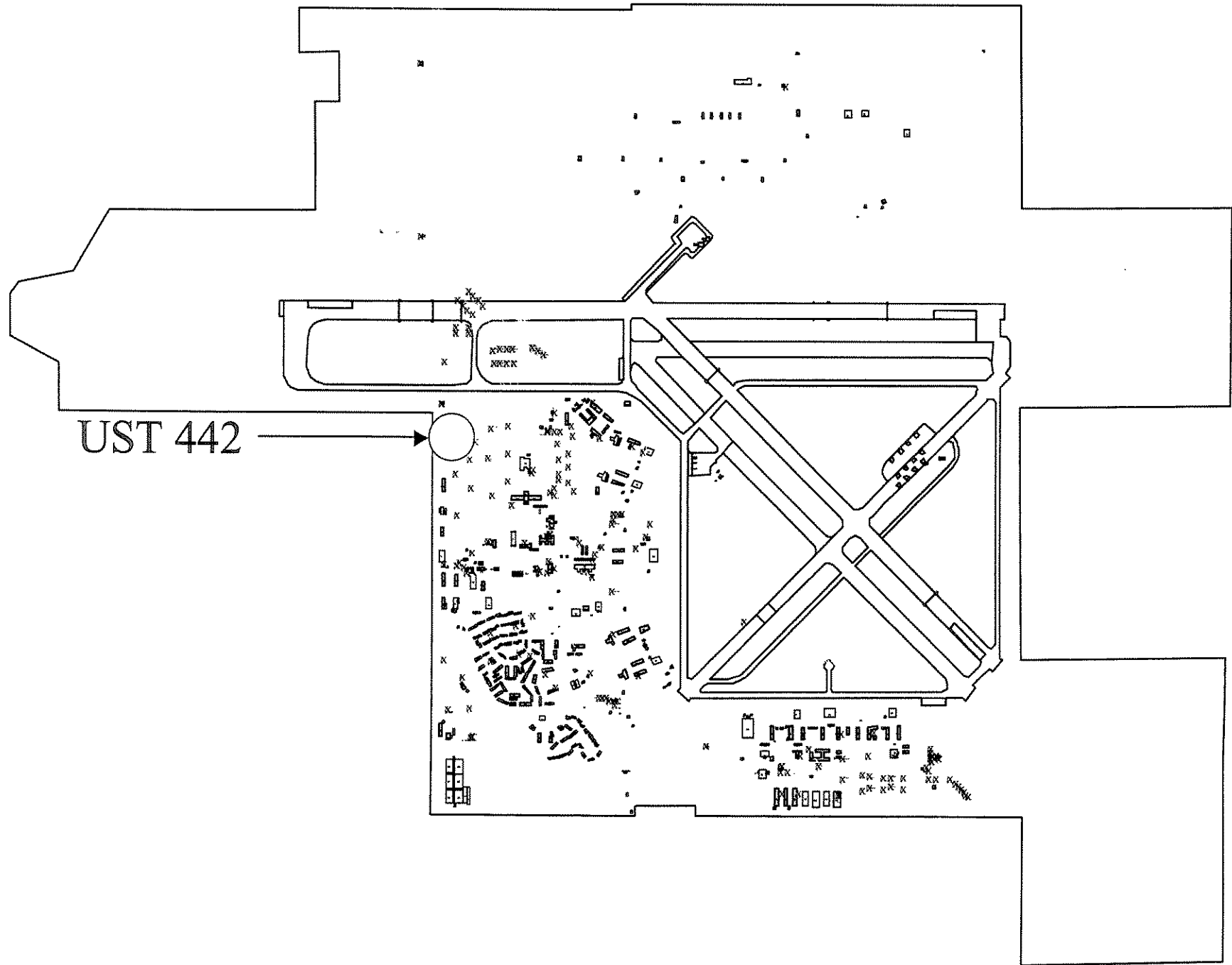


UST 442:

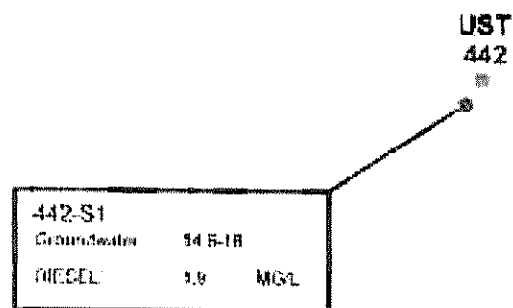
Reportedly 500 gallon concrete diesel UST

Removed – Unknown. Geophysical survey in 1997 and backhoe potholing performed in 2003 found no evidence of UST or soil contamination

Recommended for Closure – BNI Tech Memo 2

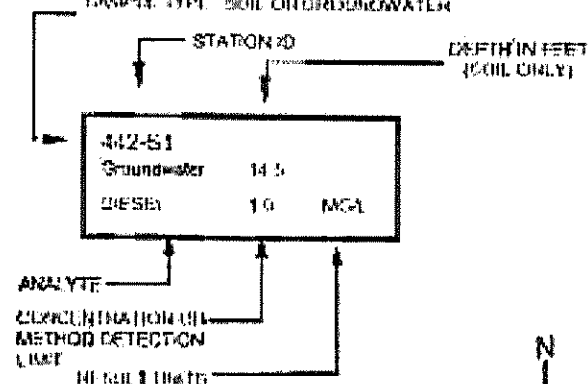


484



LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORING / HYDROSPINCH SAMPLE LOCATION(S)
- FENCE
- WET DRAIN
- CURB/VEH
- ROADS
- BUILDINGS
- SAMPLE TYPE: SOIL OR GROUNDWATER



NOTES
 U/L = MICROGRAMS PER LITER
 MGL = MILLIGRAMS PER LITER
 M/KG = MILLIGRAMS PER KILOGRAM

40 0 40 Feet

UST Investigation TM Addendum

Figure 4-25

Site Map - UST 442

NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
 CLEAN II Program

Date: 11/22/96
 File No: 17545116
 Job No: 22214-179
 Rev No: C

Analytical Results for Underground Storage Tank 442

Sample Number	Location	Depth (feet bgs)	TPH as Diesel*	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)									
175S118	442-S1	7.3 – 8	32 U	52 U	78 U	52 U	100 U	52 U	130 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)									
175HP76	442-S1	14.5 – 18	1.9	0.2 U	0.3 U	0.2 U	0.4 U	0.2 U	0.5 U

Note:

* TPH as diesel results reported in milligrams per kilogram for soil and milligrams per liter for groundwater (parts per million)

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

MTBE – methyl-tert-butyl ether

TPH – total petroleum hydrocarbons

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

FEB 06 2004
REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-445
Site Address: Located in open area between North and Fourth Streets, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000T22430071

Date spill/leak reported to regulatory agency: December 1994 (estimated)
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 7, 1994
Completion date for active remediation: December 29, 1994

	Easting	Northing
Coordinates for tank:	6737535.50000	1880438.25000

Dates for sample analysis: December 1994

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Not applicable. Groundwater was not encountered during soil excavation to a depth of 14 feet below ground surface and soil sample analytical results from bottom of excavation were nondetect

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Greater than 14 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater was not encountered during excavation to 14 feet below ground surface and soil sample analytical results from bottom of excavation were nondetect

Remedial action taken?

Yes. Contaminated soil was excavated during UST removal

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Contaminated soil was excavated during UST removal

Site Closure: Due to limited exposure pathways (i.e., the site is covered with approximately 14 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature

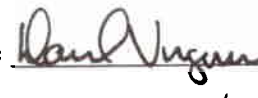


Date

1/25/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Date

1/19/05

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-446
Site Address: Located adjacent to the east side of Building 446, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	Tank removed in 1995
Completion date for active remediation:	Tank removed in 1995

	Easting	Northing
Coordinates for tank:	6738152.00000	1880614.25000

Dates for sample analysis: 1995 and January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Analytical results for soil are nondetect

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical result for MTBE is below tap water PRG and drinking water MCL.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 16.5 feet below ground surface

Is groundwater or surface water impacted? No. Analytical result for MTBE is below tap water PRG and drinking water MCL

Remedial action taken? Yes. UST was removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. UST was removed in 1995

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature

Liann P Chavez

Date 5-17-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



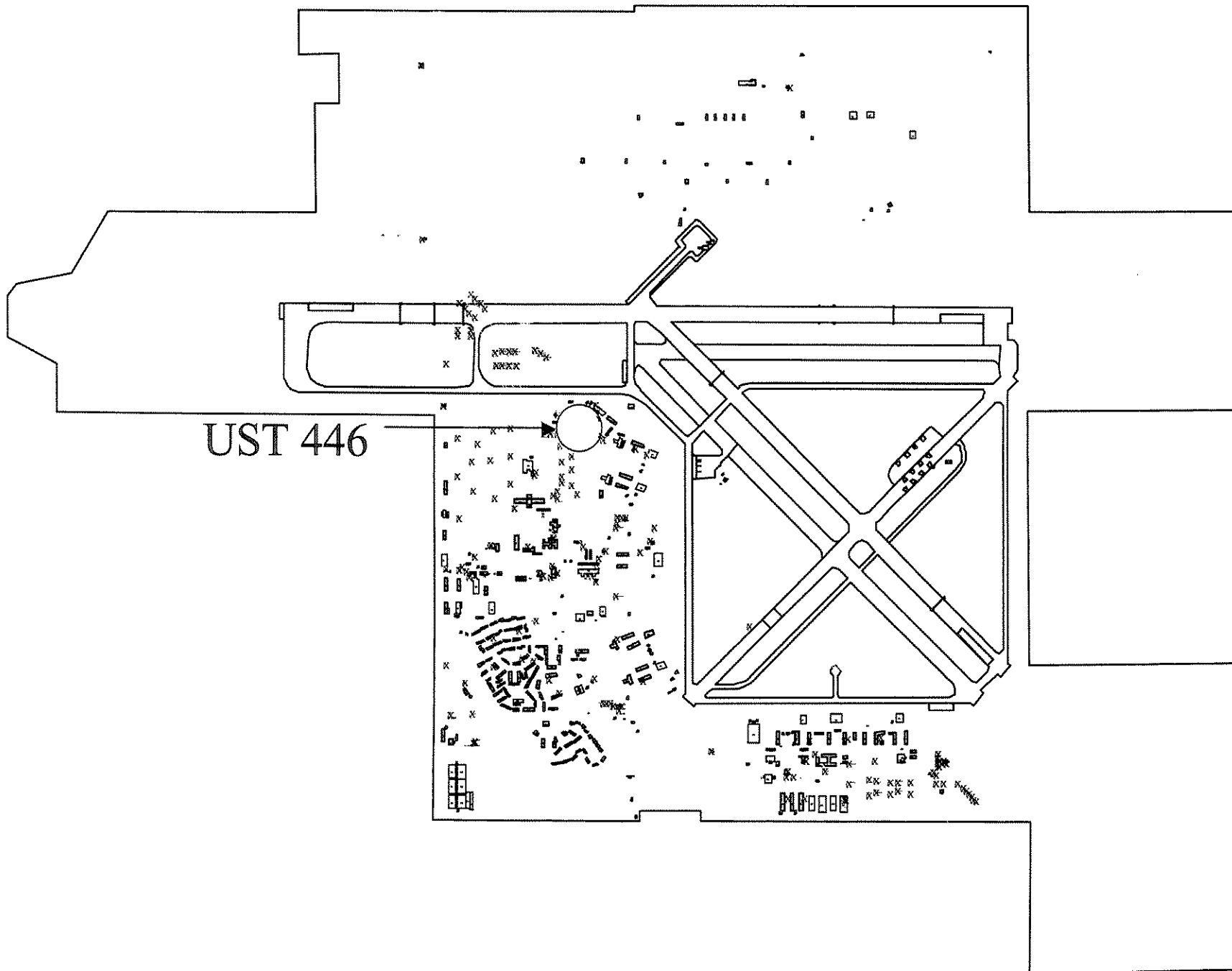
UST 446:

250 gallon steel diesel UST

Removed 1995

Recommended for Closure – BNI Tech Memo 2

UST 446



446

446

446-S1

NO ANALYTES DETECTED
AT THIS LOCATION

402

LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORING / HYDROPUNCH SAMPLING LOCATIONS
- FENCE
- WET DRAM
- CULVERT
- ROADS
- BUILDINGS

SAMPLE TYPE: SOIL OR GROUNDWATER		
STATION ID	DEPTH IN FEET (BOL ONLY)	
42B-S1		
Groundwater	14.5	
METHA-PARA-XYLENE	0.02	1070
O-XYLENE	0.25	6000

ANALYTE
CONCENTRATION OR
METHOD DETECTION
LIMIT
RESULT UNITS

NOTES:
1070 = MICROGRAMS PER LITER
6000 = MILLIGRAMS PER LITER
0.02 = MILLIGRAMS PER KILOGRAM

40 0 40 Feet

UST Investigation TM Addendum

Figure 4-28

Site Map - UST 446

NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
CLEAN II Program

Date: 11/27/00
File No.: 175L5119
Job No.: 2221A-1/0
Rev No.: C

Analytical Results for Underground Storage Tank 446

Sample Number	Location	Depth (feet bgs)	TRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)								
175S097	446-S1	8.6 – 9	NA	NA	NA	NA	NA	120 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)								
175HP52	446-S1	16.5 – 20	NA	NA	NA	NA	NA	0.5 U
Historical Data, Soil Results – Environmental Chemical Corp., UST Removal/Replacement, 1995 (mg/kg)								
446 EXC	Tank pit bottom	8	20 U	0.005 U	0.005 U	0.005 U	0.005 U	NA
446 Pipe trench	Pipeline	Unknown	20 U	0.005 U	0.005 U	0.005 U	0.005 U	NA

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

MTBE – methyl-tert-butyl ether

NA – not analyzed

TRPH – total recoverable petroleum hydrocarbons

UST – underground storage tank

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

Background Information

Year Installed:	1989
Construction Materials:	Steel
Capacity:	250 gallons
Contents:	Diesel
Year Removed:	1993 by Environmental Chemical Corp. (ECC)

Figure 1 shows the site location and previous and current assessment locations.

According to the Final Technical Memorandum, Underground Storage Tank Site Investigation, dated March 2000, prepared by Bechtel National, Inc. (BNI, 2000), ECC removed a 250-gallon UST in 1993 at the location shown on Figure 1. Two soil samples were collected as part of tank closure. The concentration of total petroleum hydrocarbons quantitated as diesel (TPH-diesel) in one of the samples exceeded the cleanup level of 1,000 milligrams per kilogram (mg/kg).

In 1999, BNI advanced a hand-auger soil boring and a HydroPunch groundwater boring. The soil boring was located at the former UST location. TPH-gasoline concentrations of 360 and 7,200 milligrams per kilogram (mg/kg) were reported for the soil samples collected at depths of 6 and 10 feet below ground surface (bgs), respectively. The groundwater sample was collected approximately 50 feet north (downgradient) of the former tank location. Concentrations of constituents of concern were below their respective action levels or not detected.

In 2000, Geofon, Inc., removed approximately 151 cubic yards (cy) of fuel impacted soil. Confirmation sampling (one excavation bottom and five excavation sidewall soil samples) showed that cleanup levels for TPH-gasoline and TPH-diesel were met. A groundwater sample collected from the excavation revealed a benzene concentration of 29.7 micrograms per liter (ug/L), and that of toluene of 511 ug/L, which exceed their respective action criteria of 1 ug/L and 150 ug/L, respectively. The other constituents of concern met their respective action criteria.

PWC Investigation

The purpose of current assessment activity was to address the Problem Statement: *Groundwater exceeded action levels for benzene and toluene*. Field activities performed May 12, 2004.

In accordance with the work plan, a groundwater sample was collected from a temporary well located approximately 55 feet north-northwest (downgradient) of the former UST location (see Figure 1). A sloping drainage swale and the presence of numerous utilities precluded collecting a sample closer to the former UST location. The temporary well was installed using the hydraulic probe on the Site Characterization and Analysis Penetrometer System (SCAPS). The well was screened with ¾-inch diameter PVC from 10 to 20 feet bgs. The groundwater grab sample was collected unpurged using a single-use disposable bailer. The sample was immediately delivered to an on-site mobile laboratory for analytical testing. BTEX and MTBE were not detected in the groundwater sample. Groundwater was measured at 17.06 feet bgs; however, the well was given insufficient time to allow it to equilibrate. The temporary well was screened with 1-inch diameter PVC from 10 to 20 feet bgs. The groundwater grab sample was collected unpurged using a single-use disposable bailer. Upon removal of the casing, the lower 15 feet of casing remained in the hole. The temporary well was abandoned by grouting in place.

Conclusions and Recommendation

Based on the findings of our assessment, and the information from previous assessment activities, the extent of groundwater contamination appears to be limited. The presence of a drainage swale and utilities prevented the collection of a groundwater sample within 55 feet downgradient of the former UST location, where elevated benzene and toluene concentrations had been detected in 2000. However, based on the non-detection of these constituents of concern in the downgradient sample collected during this investigation, it appears that benzene and toluene concentrations decrease significantly downgradient and/or have naturally attenuated with time.

It is the opinion of PWCSO that further assessment or remediation at this site is unnecessary. We recommend that no further action be considered for this site.

Site Characterization and Closure Information

<i>Description of the former UST:</i>	See Background Information, page 1.
<i>Contaminants Identified:</i>	None detected. See attached analytical results table.
<i>Amount of Contaminants Leaked:</i>	None.
<i>MTBE:</i>	None detected.
<i>Description of the soil/geology:</i>	Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the highest TPH-diesel concentration measured in soil sidewall samples following excavation in 2000 was 13 mg/kg.

Estimated volume of contaminated soil left on site and concentration: None.

Is groundwater contamination completely delineated? Yes. Current analytical results for groundwater show that constituents of concern are not detected within 55 feet downgradient of the former UST.

Monitoring wells installed, properly permitted? No monitoring wells were installed.

Depth to groundwater: Approximately 17 feet bgs.

Is groundwater or surface water impacted? The analytical results collected during this investigation met cleanup goals for the site (below tap water PRGs and drinking water MCLs). Groundwater with elevated concentrations detected near the UST in 2000 do not appear to have migrated downgradient.

Remedial action taken? UST removed 1993. 151 cubic yards of fuel impacted soil removed 2000.

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes.

Site Closure: No impacted soil remains. Current testing indicates that contaminant migration in groundwater is not migrating downgradient. The recommendation for site closure is accepted and no further action is required at this site.

Signature: 

Date: 6/7/05

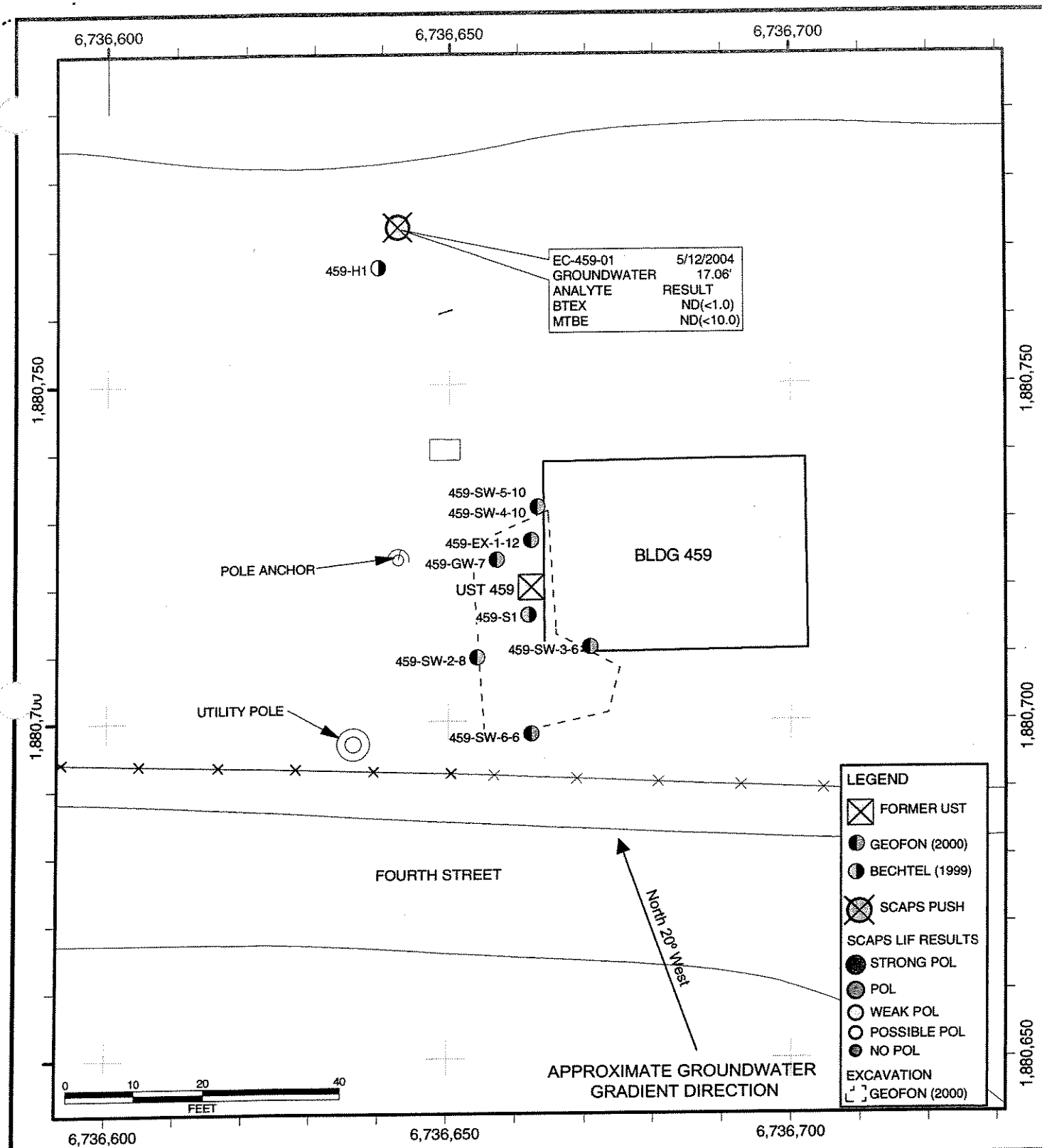
N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature: 

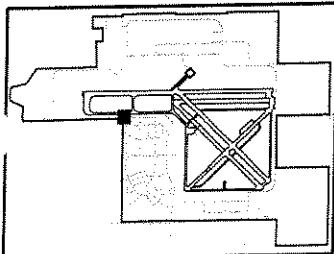
Date: 5-25-05

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

Attachments: Figure 1 – Assessment Results
Table 1 – Site Cleanup Goals
Table 2 – SCAPS and Groundwater Results
Laboratory Analytical Report and Chain-of-Custody Documentation



OVERVIEW MAP - NAF EL CENTRO



MAP PROJECTION: NAD 83
CALIFORNIA STATE PLANE
ZONE 6, SURVEY FEET

ASSESSMENT RESULTS UST SITE 459

NAVAL AIR FACILITY EL CENTRO
EL CENTRO, CA



NAVY PUBLIC WORKS CENTER
ENVIRONMENTAL DEPARTMENT
2730 MCKEAN STREET
SAN DIEGO, CALIFORNIA 92136

DATE: Oct 21, 2004
FILE: EICentroPWC4

FIGURE:

1

Notes on Figure 1 (previous page):

UST = Underground Storage Tank

SCAPS = Site Characterization and Analysis Penetrometer System

LIF = Laser Induced Fluorescence

POL = Petroleum, oils, and lubricants

TPH_{d,g} = Total Petroleum Hydrocarbons as diesel, gasoline analyzed using the California Department of Health Services method in soil samples, reported in milligrams per kilogram.

BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed using EPA test method 8021 in water samples.

MTBE = Methyl-tertiary-butyl ether analyzed using EPA test method 8021 in water samples.

Reporting units for BTEX and MTBE results are micrograms per liter.

ND = Analyte not detected. Detection limit shown in parentheses.

Cross sections show relative intensity of fluorescence using red tint in SCAPS LIF soundings. (See text and attached SCAPS LIF logs.)

Base map after San-Lo Aerial Surveys, Inc., planimetry from aerial photography, February 2004.

Table 1 – Chemical Constituents of Potential Concern
UST Assessment Sites
Naval Air Facility, El Centro

Chemical	Soil Cleanup Concentration (mg/kg)	Groundwater Maximum Allowable Concentration (µg/L)
TPH-Gasoline	100	N/A
TPH-Diesel	1,000	N/A
Benzene	1.4 ^a	1.0 ^b
Toluene	520 ^a	150 ^b
Ethylbenzene	230 ^a	700 ^b
Total Xylenes	210 ^a	1,750 ^b
MTBE	N/A	13 ^c

Notes:

Concentrations are approved project action levels as presented on Table 3-1 of Bechtel National, Inc., *Final Technical Memorandum No. 2 UST Site Investigation, NAF El Centro*, except for (c), below, which was revised based on a comment from the RWQCB in a letter dated September 23, 2003.

a = based on the 1998 US EPA Region 9 preliminary remediation goal for industrial soil

b = based on the 1995 State of California maximum contaminant level for drinking water

c = based on the May 2000 State of California maximum contaminant level for drinking water (Office of Environmental Health Hazard Assessment).

mg/kg = milligrams per kilogram

µg/L = micrograms per liter

TPH = Total petroleum hydrocarbons (separate gasoline and diesel analytical ranges)

N/A = Not Applicable

MTBE = Methyl-tertiary-butyl ether

Table 2 - Groundwater Analytical Data Summary

UST Site 459
Naval Air Facility, El Centro

Push/Sample ID	Date	Max. LIF Depth (feet)	Max. Depth (feet, bgs)	Max. Fluorescence (counts) @ depth (feet, bgs)	Interpretation	Sample Results at depth in feet bgs ¹	Well Screened Interval (feet)
EC-459-01	5/12/2004					17.06': BTEX: <1.0 ug/L MTBE: <10.0 ug/L	10'-20'

Notes:

¹ Depth is sampling depth for soil samples, measured depth to water for groundwater samples.

LIF = Laser Induced Fluorescence

bgs = below ground surface

TPHd,g = Total Petroleum Hydrocarbons as diesel, gasoline analyzed using the California Department of Health Services method

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes analyzed using EPA test method 8021

MTBE = Methyl-tertiary-butyl ether analyzed using EPA test method 8021

mg/kg = milligrams per kilogram

ug/L = micrograms per liter

4.13 Site 459: Site Description and Analytical Results

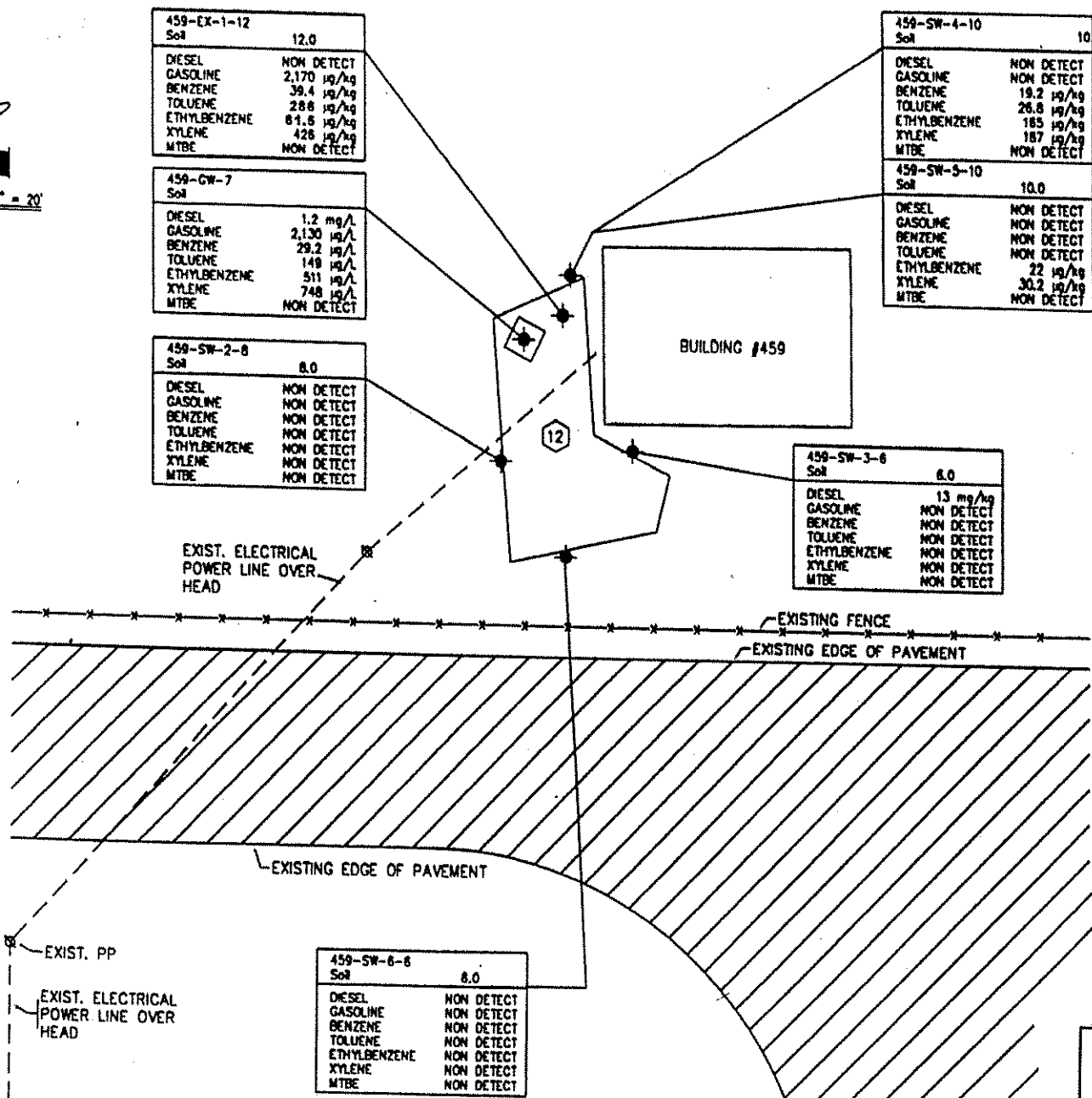
UST 459 was a 250-gallon steel diesel fuel UST removed in 1993 by ECC (1993). According to facility records, UST 459 was installed in 1989. This tank was located on the western exterior of Building 459.

Several previous soil and groundwater investigations have been conducted at UST Site 459 (Table 4-10). In 1993, ECC collected two soil samples as part of the tank removal. The two soil samples were collected directly from the base and sidewalls of the tank excavation to approximately 5 feet bgs. In 1999, BNI advanced one soil boring (459-S1) and one HydroPunch boring (459-H1) at the UST site. Soil boring 459-S1 was advanced utilizing a hand auger due to overhead electrical wires. Two soil samples were collected directly out of the auger at approximately 6 and 10 feet bgs. The hand-augering activities were halted at 10 feet due to elevated organic vapor levels in the field crews breathing zone. The HydroPunch boring was advanced approximately 50 feet downgradient from the original tank location to 17 feet bgs. A 10-foot PVC 0.010-slotted screen was set from 7 to 17 feet bgs.

As part of this current UST site investigation/cleanup, an excavation measuring approximately 35 x 15 x 12 feet was accomplished and approximately 151 cubic yards (cyd) of fuel-impacted soil was removed and disposed of off-site (Appendix D). Upon reaching the limits of excavation, one soil sample (459-EX-1-12) and one groundwater sample (459-GW-7) was collected from the bottom of the excavation and five soil samples (459-SW-2-8, 459-SW-3-6, 459-SW-4-10, 459-SW-5-10 and 459-SW-6-6), including a field duplicate, were collected from the sidewalls of the excavation (Figure 4-13, Table 4-10).

All soil samples collected did not have any concentrations above the soil cleanup levels. The groundwater sample (459-GW-7) had a concentration of benzene (29.2 µg/L) above the maximum allowable groundwater concentration of 1 µg/L.

SCALE: 1" = 20'



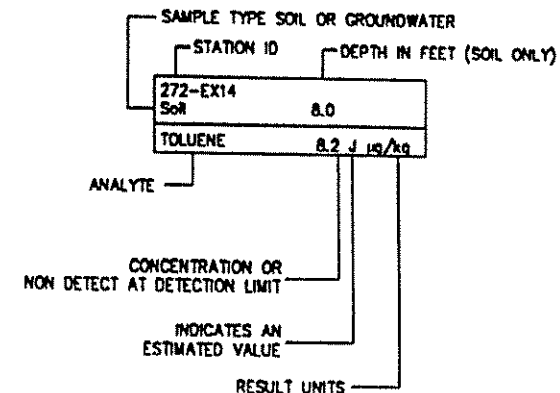
LEGEND

- EXIST. ASPHALT
- EXIST. DIRT
- EXCAVATED AREA
- EXIST. BLDG.
- EXCAVATION SAMPLE POINT
- EXCAVATION DEPTH

NOTES:

ALL ANALYTICAL DATA PRESENTED ON THIS FIGURE IS FROM CURRENT 2000 REMOVAL ACTION

ALL SOIL AND GROUNDWATER SAMPLES COLLECTED DURING THE CURRENT REMOVAL ACTION WERE ANALYZED FOR MTBE



Technical Memorandum
Figure 4-13
Site 459 - Site Map

NAF El Centro
Imperial County, California



Date: November 2000
Contract No.: N68711-97-D-870
DO No.: 0033

Table 4-10
Analytical Results for Site 459

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene	Xylene ^c	MTBE ^c	Organolead ^d
Soil Results - GEOFON, Soil Removal/Field Investigation, May/June 2000 (µg/kg)											
459-EX-1-12	Excavation	12	2,170	10 U ^e		39.4	286	61.6	426	10 U	
459-SW-2-8	Excavation	8	1,000 U	10 U ^e		5 U	5 U	5 U	10 U	10 U	
459-SW-3-6	Excavation	6	1,000 U	13 ^e		5 U	5 U	5 U	10 U	10 U	
459-SW-4-10	Excavation	10	1,000 U	10 U ^e		19.2	165	26.8	187	10 U	
459-SW-5-10	Excavation	10	1,000 U	10 U ^e		5 U	22	5 U	30.2	10 U	
459-SW-6-6	Excavation	6	1,000 U	10 U ^e		5 U	5 U	5 U	10 U	10 U	
Groundwater Results - GEOFON, Soil Removal/Field Investigation, May/June 2000 (µg/L)											
459-GW-7	Excavation		2,130	1.2 ^f		29.2	511	149	748	1 U	
Historical Data, Soil Results - BNI, Field Investigation, January/February 1999 (mg/kg)											
175S049	459-S1	6	360	300		0.12	0.43	0.47	5.1	1.1 U	
175S050	459-S1	10	7,200	290		13	230	100	720	2.3 U	
Historical Data, Groundwater Results - BNI, Field Investigation, January/February 1999 (µg/L)											
175HP20	459-H1	13-17 ^g	500 U	0.5 U ^f		0.8	1 U	1 U	3.8	10 U	
Historical Data, Soil Results - Environmental Chemical Corp., UST Removal Phase 1, 1993 (mg/kg)^h											
459-S1		5		6,640							
459-S2		Unknown		759							

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e diesel results for soil reported in milligrams per kilogram
- ^f diesel results for groundwater reported in milligrams per liter
- ^g Hydropunch screened interval
- ^h collected during UST removal

Table 4-10 (Continued)
Analytical Results for Site 459

Acronyms/Abbreviations:

µg/L - micrograms per liter
µg/kg - micrograms per kilogram
bgs - below ground surface
BNI - Bechtel National, Inc.
mg/kg - milligrams per kilogram (parts per million)
MTBE - methyl-tertiary-butyl ether
TRPH - total recoverable petroleum hydrocarbons
U - not detected above the referenced detection limit



May 20, 2004

Mr. David Bloom
Navy Public Works Center
2730 McKean Street
Suite 1
San Diego, CA 92136-5294

**SUBJECT: DATA REPORT – NAS – SITE 459 – EL CENTRO, CA -
NAVY PWC PROJECT #1113621902008**

H&P Project # NP051104W1

Mr. Bloom:

Please find enclosed a data report for the above referenced location. Samples were analyzed on-site in DOHS certified mobile laboratory (CERT #1317).

Project Summary

The following analyses were conducted:

- 1 water for volatile aromatic hydrocarbons (BTEX) & MTBE by EPA Method 8021B

The samples were received on-site in appropriate containers with appropriate labels, seals, and chain-of-custody documentation.

Project Narrative

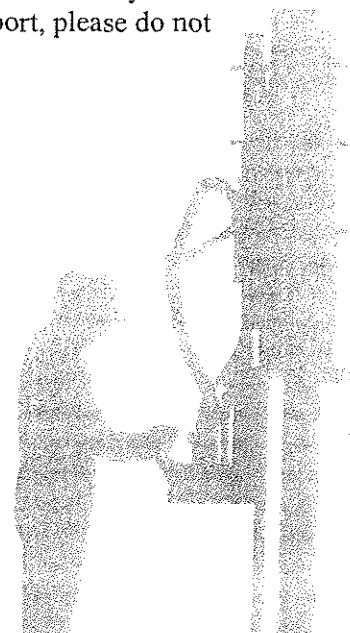
The results for all analyses and required QA/QC analyses are summarized in the enclosed tables. All calibrations, blanks, surrogates, and spike recoveries fulfill quality control criteria.

H&P Mobile GeoChemistry appreciates the opportunity to provide analytical services to Navy Public Works Center on this project. If you have any questions relating to this data or report, please do not hesitate to contact us.

Sincerely,


Dr. Blayne Hartman

432 North Cedros Avenue, Solana Beach, California 92075 | 858.793.0401 — Fax 858.793.0404
148 South Vinewood Street, Escondido, California 92029 | 760.735.3208 — Fax 760.735.2469
2373 208th Street, Suite F-1, Torrance, California 90501 | 310.782.2929 — Fax 310.782.2798
www.HandPmg.com | 1-800-834-9888





NAVY PUBLIC WORKS PROJECT #1113621902008
NAS
SITE 459
EL CENTRO, CA

H&P Project #NP051104-W1

BTEX, MTBE (EPA Method 8020 Modified) ANALYSES OF WATERS

SAMPLE NUMBER	DATE ANALYZED	MTBE (ug/l)	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYLBENZ (ug/l)	XYLENES (ug/l)	SURROGATE (%REC)
METHOD BLANK	5/12/2004	ND	ND	ND	ND	ND	108
EC-459-01-GW	5/12/2004	ND	ND	ND	ND	ND	98
REPORTING LIMITS		10.0	1.0	1.0	1.0	1.0	53%-145%
DETECTION LIMITS		1.0	0.5	0.5	0.5	0.5	

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
5-26-2004

QA/QC REPORT - CALIBRATION DATA

H&P Project #NP051104-W1
 DAILY CALIBRATION DATE : 05/12/04

COMPOUND	CALIBRATION RANGE		INITIAL			OPENING			CLOSING / LCS		
	SOIL (ug/kg)	WATER (ug/L)	CALIB DATE	RF	%RSD	AREA	RF	%DIFF	AREA	RF	%DIFF
MTBE	500 - 25	2500 - 125	4/2/2004	3.07	7.2%	291	2.91	5.1%	322	3.22	5.0%
BENZENE	500 - 25	2500 - 125	5/6/2004	9.44	11.6%	1,035	10.35	9.6%	881	8.81	6.7%
TOLUENE	500 - 25	2500 - 125	5/6/2004	17.80	12.5%	1,710	17.10	4.0%	1,558	15.58	12.5%
TFT	500 - 25	2500 - 125	5/6/2004	5.49	9.8%	582	5.82	6.1%	604	6.04	10.1%
ETHYLBENZENE	500 - 25	2500 - 125	5/6/2004	15.77	5.6%	1,584	15.84	0.5%	1,391	13.91	11.8%
m&p-XYLENES	500 - 25	2500 - 125	5/6/2004	20.54	8.8%	1,925	19.25	6.3%	1,747	17.47	15.0%
o-XYLENES	500 - 25	2500 - 125	5/6/2004	16.61	7.7%	1,592	15.92	4.1%	1,530	15.30	7.9%

INITIAL RF - AVERAGE RESPONSE FACTOR FROM MULTIPOINT CALIBRATION CURVE
 % RSD - LINEARITY OF MULTIPOINT CALIBRATION CURVE (+/- 20% ACCEPTABLE LIMITS)
 AREA - AREA COUNTS FROM DAILY CALIBRATION STANDARD
 RF - DETECTOR RESPONSE FACTOR FROM MID-POINT CALIBRATION STANDARD
 % DIFF - DIFFERENCE, IN PERCENT, BETWEEN THE AVERAGE RF AND THE OPENING OR CLOSING RF
 OPENING - MID-POINT CALIBRATION STANDARD ANALYZED BEFORE SAMPLE ANALYSES BEGIN
 CLOSING - MID-POINT CALIBRATION STANDARD ANALYZED AFTER SAMPLES ANALYSES ARE COMPLETE

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
 ANALYSES PERFORMED BY: MS. JANIS VILLARREAL
 DATA REVIEWED BY: DR. BLAYNE HARTMAN

QA/QC REPORT - MS/MSD DATA

MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD) FOR WATERS

ANALYSIS DATE : 05/12/04

H&P Project #NP051104-W1

COMPOUND	SPK CONC (ug/L)	MS CONC (ug/L)	%REC MS	MSD CONC (ug/L)	%REC MSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
MTBE	20.0	17.8	89.0%	19.8	99.0%	10.6%	15%	75% - 125%
BENZENE	20.0	17.9	89.5%	19.8	99.0%	10.1%	15%	75% - 125%
TOLUENE	20.0	16.1	80.5%	16.3	81.5%	1.2%	15%	75% - 125%
ETHYLBENZENE	20.0	17.8	89.0%	18.5	92.5%	3.9%	15%	75% - 125%
TOTAL XYLENES	40.0	34.2	85.5%	34.8	87.0%	1.7%	15%	75% - 125%

SPK CONC - CONCENTRATION SPIKED INTO MATRIX

MS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE

% REC - PERCENT RECOVERY OF SPIKE FROM MATRIX

RPD - RELATIVE PERCENT DIFFERENCE BETWEEN MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

RECEIVED
 DEC 01 2004
 REGION 7

QA/QC REPORT - LCS/LCSD DATA

LABORATORY CONTROL SAMPLES (LCS & LCSD) FOR WATERS

ANALYSIS DATE : 05/12/04

H&P Project #NP051104-W1

COMPOUND	SPK CONC (ug/L)	LCS CONC (ug/L)	%REC LCS	LCSD CONC (ug/L)	%REC LCSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
MTBE	20.0	19.7	98.5%	20.2	101.0%	2.5%	15%	75% - 125%
BENZENE	20.0	17.4	87.0%	17.2	86.0%	1.2%	15%	75% - 125%
TOLUENE	20.0	16.4	82.0%	16.3	81.5%	0.6%	15%	75% - 125%
ETHYLBENZENE	20.0	17.8	89.0%	17.4	87.0%	2.3%	15%	75% - 125%
TOTAL XYLENES	40.0	33.6	84.0%	33.4	83.5%	0.6%	15%	75% - 125%

SPK CONC - CONCENTRATION SPIKED INTO MATRIX

LCS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE

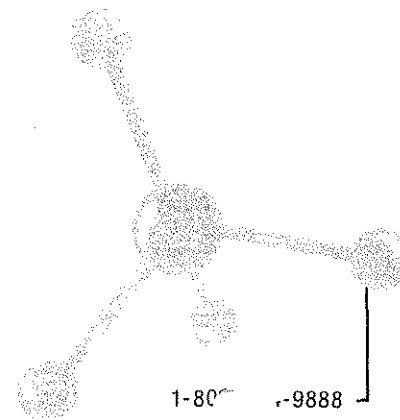
% REC - PERCENT RECOVERY OF SPIKE FROM LAB CONTROL SAMPLE

RPD - RELATIVE PERCENT DIFFERENCE BETWEEN LAB CONTROL AND LAB CONTROL DUPLICATE RECOVERIES

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN



Date: 5-12-06
H&P Project # NP051104W1
Outside Lab: _____

☐ 148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469
☒ 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404
☐ 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

Client: Navy Public Works
Address: 2730 Mc Kean St. Suite 1
San Diego
Phone: Fax:

Collector: D. Bloom Page: 5 Of 6
Client Project # 113621902008 Project Manager D. Bloom
Location: NAS El Centro Site 459
Turn around time: _____

Global ID: T060258680

EDF: Yes No

Sample Receipt

Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
N/A (Received on Site)

8260B

[illegible]

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal () tion:

☐ Disposal @ \$2.00 each

☐ *Return to client*☐ Pickup

Background Information

Year Installed:	Unknown
Construction Materials:	Single-wall steel
Capacity:	150 gallons
Contents:	Diesel
Year Removed:	1993 by Environmental Chemical Corp. (ECC)

Figure 1 shows the site location and previous and current assessment locations.

In 1993, ECC removed a 150-gallon diesel UST at the location shown on Figure 1. Three soil samples were collected from the sidewalls and bottom of the tank excavation. The sample collected from the bottom of the tank cavity indicated the greatest concentration of diesel at 26,380 milligrams per kilogram (mg/kg) as reported in *Final Technical Memorandum Underground Storage Tank Site Investigation*, dated March 2000, prepared by Bechtel National, Inc. (BNI, 2000).

In 1999, BNI collected a groundwater sample from a depth range of 6 to 16 feet below ground surface (bgs) from a HydroPunch boring approximately 5 feet northwest (downgradient) from the former tank location. Analytical testing results indicate a benzene groundwater concentration of 7.4 micrograms per liter (ug/L), which exceeds site cleanup goals. The other groundwater constituents analyzed for were detected below action levels or not detected.

PWC Investigation

The purpose of our current assessment activity was to address the Problem Statement: *Soil exceeds cleanup levels for TPH-diesel. Groundwater exceeds action level for benzene.* Field activities were performed between May 12 and 13, 2004.

In accordance with the work plan, Laser Induced Fluorescence (LIF) was measured *in situ* using the Site Characterization and Analysis Penetrometer System (SCAPS) at four locations as shown on Figure 1. The LIF data are summarized and interpreted in Table 2. At three of the locations, no fluorescence characteristic of petroleum, oil, or lubricants (POL) was encountered. At the remaining location, EC-490-03 (located within 10 feet south of the former UST), weak fluorescence suggesting petroleum, oil, or lubricants (POL) (*i.e.*, intensity above background) was encountered between approximately 4 and 6.5 feet below ground surface.

A soil sample was collected from EC-490-03 from a depth of 4.5 to 5.0 feet bgs. At location EC-490-04, a groundwater sample was collected from a 3/4-inch diameter PVC temporary well screened with 0.010-inch slot from 7 to 17 feet bgs. The groundwater grab sample was collected unpurged using a single-use disposable bailer. The samples were immediately delivered to an on-site mobile laboratory for analytical testing. The soil sample contained 1,300 mg/kg total petroleum hydrocarbons quantitated as diesel (TPH-diesel) which exceeds the cleanup standard of 1,000 mg/kg. Benzene was detected in the groundwater sample at a concentration of 1.1 ug/L, slightly exceeding the cleanup goal of 1.0 ug/L; the other BTEX compounds and MTBE were not detected above their respective laboratory detection limits. Groundwater was measured at approximately 8.28 feet bgs. The temporary well was abandoned by grouting in place.

Conclusions and Recommendation

Based on the findings of our assessment, and the information from previous assessment activities, the vertical and horizontal extent of fuel-impacted soils has been delineated to the north, west, and east to the extent practicable. Groundwater approximately 25 feet north (downgradient) of the former UST contains benzene at a level slightly in excess of the cleanup standard (1.1 ug/L). Comparing the 7.4 ug/L benzene concentration measured in 1999 at the approximate former UST location, a marked decrease in concentration is noted across a relatively short distance over a five-year period. The data suggest that natural attenuation is reducing benzene concentrations in groundwater.

To delineate the extent of soil contamination to the south, a soil sampling program consisting of one or more 10-foot step-out soil borings south of EC-490-03 would provide data to assess the extent of soil contamination. Based on the findings at this site and other UST sites at NAF El Centro, it is likely that soil contamination is localized in a pocket near assessment point EC-490-03. It is noted that the detected TPH-diesel concentration is just above the cleanup goal, and was found in sample from the relatively shallow depth of 4.5 to 5.0 feet bgs. Due to the presence of two water mains and other underground utilities, excavation is currently an unrealistic option. If site use is significantly changed, such as would involve the demolition of utilities or Building 490, soil excavation would become a viable option.

Based on the observed decreasing benzene concentration trend in groundwater, and the limited extent of TPH-diesel at concentrations exceeding the cleanup action level in soil samples, it is the opinion of PWCSO that further assessment or remediation of groundwater at this site is unnecessary. Therefore, we recommend that no further action for groundwater be considered for this site. For soil, although the concentration of TPH-diesel detected slightly exceeded the cleanup standard, the concentration trends measured in soil show well over an order of magnitude decrease since tank removal in 1993. In three of the four cardinal directions, soil contamination was not indicated. Soil does not appear to be a significant contributor to groundwater contamination. Therefore, we recommend no further action for soil at this site.

Site Characterization and Closure Information

<i>Description of the former UST:</i>	See Background Information (page 2).
<i>Contaminants Identified:</i>	TPH-diesel in soil. Benzene in groundwater. See attached analytical results tables.
<i>Amount of Contaminants Leaked:</i>	Not estimated. See attached analytical results tables.
<i>MTBE:</i>	None detected.
<i>Description of the soil/geology:</i>	Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Soil contamination is delineated to the north, east, and west. Due to the presence of utilities the extent of soil contamination could not be fully delineated to the south. The depth of soil contamination is approximately 4.5 to 5.5 feet bgs. The maximum TPH-diesel concentration measured during this investigation is 1,300 mg/kg.

Estimated volume of contaminated soil left on site and concentration: Not Estimated.

Is groundwater contamination completely delineated? Benzene concentration of 1.1 ug/L measured 25 feet north of the former UST indicates decreasing concentration trend and approximate northerly (downgradient) extent of groundwater contamination. Current analytical results for groundwater show that MTBE and other constituents of concern are not detected.

Monitoring wells installed, properly permitted? No monitoring wells were installed.


Depth to groundwater: Approximately 8 feet bgs.


Is groundwater or surface water impacted? Yes. Analytical results for groundwater indicate benzene at 1.1 ug/L slightly exceeds the cleanup goal of 1.0 ug/L.

Remedial action taken? UST removed 1993.

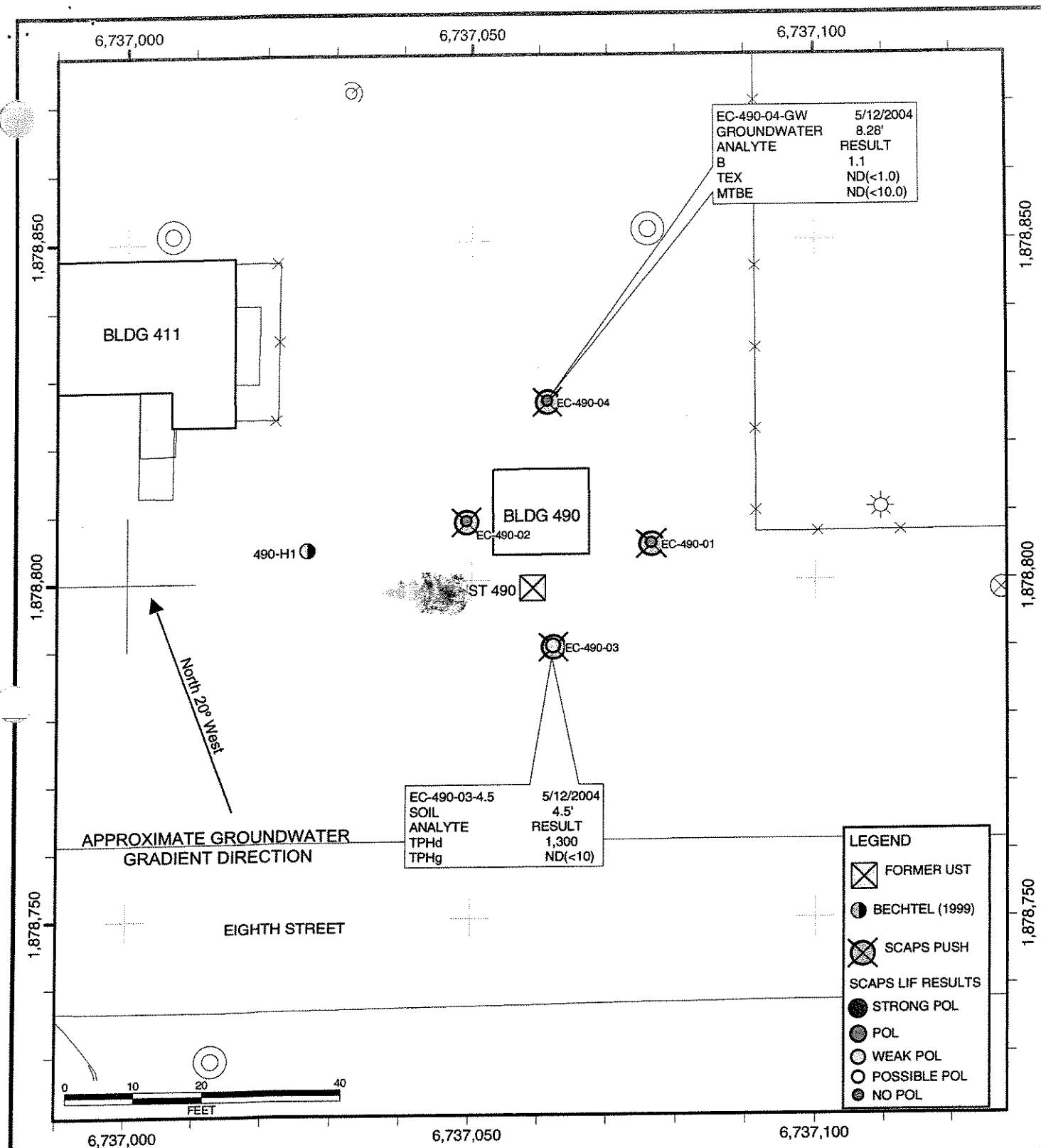
Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes.

Site Closure: Due to limited amount of impacted soil that may remain, and groundwater benzene impact shown to be essentially at the cleanup level, and a site that is covered by asphalt, the contaminants that may remain do not pose an unacceptable risk to human health or the environment. The recommendation for site closure is accepted and no further action is required at this site.

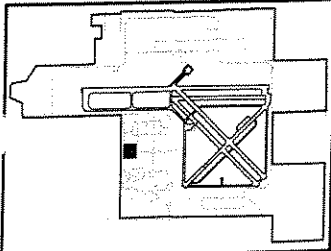
Signature:  *Date:* 6/7/05
N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature:  *Date:* 5-25-05
Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

Attachments: Figure 1 – Assessment Results
Table 1 – Site Cleanup Goals
Table 2 – SCAPS, Soil, and Groundwater Results
SCAPS Logs
Laboratory Analytical Report and Chain-of-Custody Documentation



OVERVIEW MAP - NAF EL CENTRO



MAP PROJECTION: NAD 83
CALIFORNIA STATE PLANE
ZONE 6, SURVEY FEET

ASSESSMENT RESULTS UST SITE 490

NAVAL AIR FACILITY EL CENTRO
EL CENTRO, CA



NAVY PUBLIC WORKS CENTER
ENVIRONMENTAL DEPARTMENT
2730 MCKEAN STREET
SAN DIEGO, CALIFORNIA 92136

DATE: Oct 21, 2004
FILE: ElCentroPWC4

FIGURE:

1

Notes on Figure 1 (previous page):

UST = Underground Storage Tank

SCAPS = Site Characterization and Analysis Penetrometer System

LIF = Laser Induced Fluorescence

POL = Petroleum, oils, and lubricants

TPH_{d,g} = Total Petroleum Hydrocarbons as diesel, gasoline analyzed using the California Department of Health Services method in soil samples, reported in milligrams per kilogram.

BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed using EPA test method 8021 in water samples.

MTBE = Methyl-tertiary-butyl ether analyzed using EPA test method 8021 in water samples.

Reporting units for BTEX and MTBE results are micrograms per liter.

ND = Analyte not detected. Detection limit shown in parentheses.

Cross sections show relative intensity of fluorescence using red tint in SCAPS LIF soundings. (See text and attached SCAPS LIF logs.)

Base map after San-Lo Aerial Surveys, Inc., planimetry from aerial photography, February 2004.

**Table 1 – Chemical Constituents of Potential Concern
UST Assessment Sites
Naval Air Facility, El Centro**

Chemical	Soil Cleanup Concentration (mg/kg)	Groundwater Maximum Allowable Concentration (µg/L)
TPH-Gasoline	100	N/A
TPH-Diesel	1,000	N/A
Benzene	1.4 ^a	1.0 ^b
Toluene	520 ^a	150 ^b
Ethylbenzene	230 ^a	700 ^b
Total Xylenes	210 ^a	1,750 ^b
MTBE	N/A	13 ^c

Notes:

Concentrations are approved project action levels as presented on Table 3-1 of Bechtel National, Inc., *Final Technical Memorandum No. 2 UST Site Investigation, NAF El Centro*, except for (c), below, which was revised based on a comment from the RWQCB in a letter dated September 23, 2003.

a = based on the 1998 US EPA Region 9 preliminary remediation goal for industrial soil

b = based on the 1995 State of California maximum contaminant level for drinking water

c = based on the May 2000 State of California maximum contaminant level for drinking water (Office of Environmental Health Hazard Assessment).

mg/kg = milligrams per kilogram

µg/L = micrograms per liter

TPH = Total petroleum hydrocarbons (separate gasoline and diesel analytical ranges)

N/A = Not Applicable

MTBE = Methyl-tertiary-butyl ether

Table 2 - SCAPS Fluorescence, Soil, and Groundwater Analytical Data Summary

**UST Site 490
Naval Air Facility, El Centro**

Push/Sample ID	Date	Max. LIF Depth (feet)	Max. Depth (feet, bgs)	Max. Fluorescence (counts) @ depth (feet, bgs)	Interpretation	Sample Results at depth in feet bgs ¹	Well Screened Interval (feet)
EC-490-01	4/2/2004	19.2	21.5	2,168 @ 10.5	No POL		
EC-490-02	4/2/2004	19.7	21.9	2,085 @ 11.0	No POL		
EC-490-03	4/2/2004	19.4	21.7	6,494 @ 5.3	Weak POL		
EC-490-03-4.5	5/12/2004					4.5': TPHd: 1,300 mg/kg TPHg: <10 mg/kg	
EC-490-04	4/2/2004	19.0	21.4	2,222 @ 11.1	No POL		
EC-490-04-GW	5/12/2004					8.28': B: 1.1 ug/L TEX: <1.0 ug/L MTBE: <10.0 ug/L	7'-17'

Notes:

¹ Depth is sampling depth for soil samples, measured depth to water for groundwater samples.

LIF = Laser Induced Fluorescence

bgs = below ground surface

POL = Petroleum, oils, or lubricants

TPHd,g = Total Petroleum Hydrocarbons as diesel, gasoline analyzed using the California Department of Health Services method

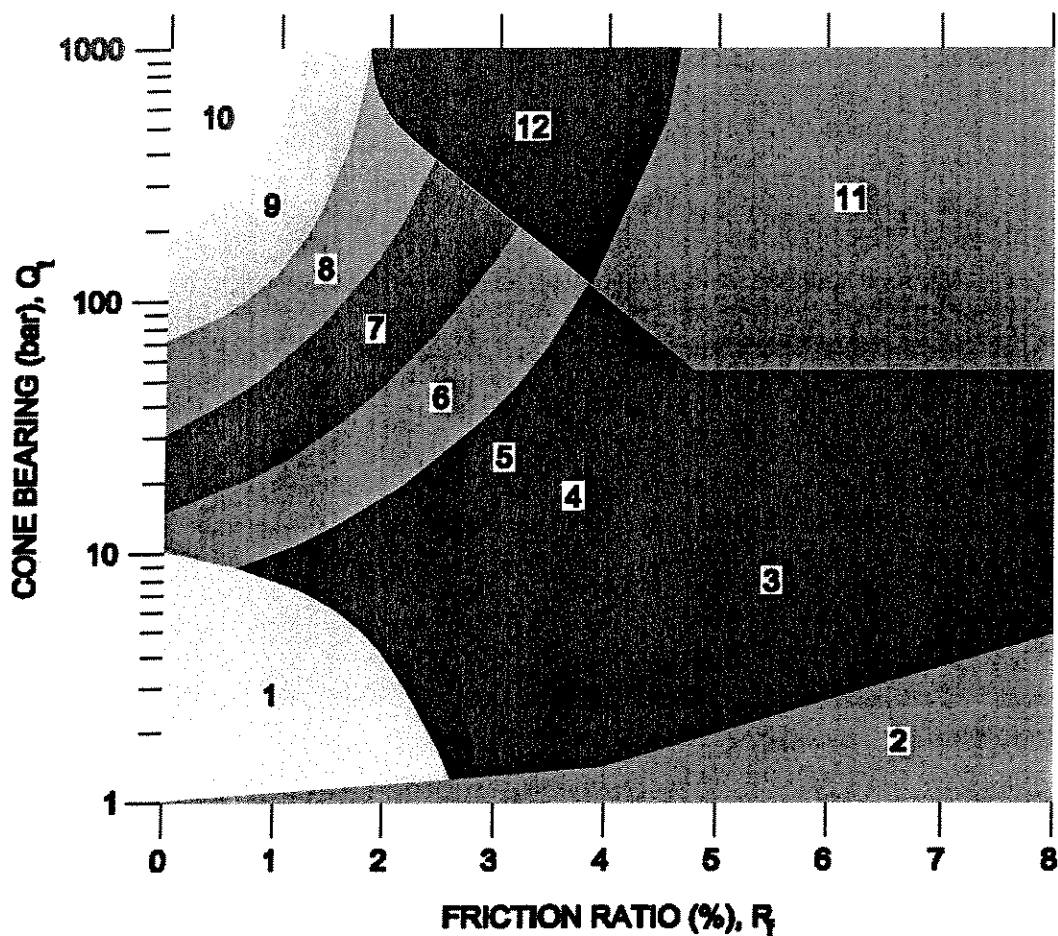
BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes analyzed using EPA test method 8021

MTBE = Methyl-tertiary-butyl ether analyzed using EPA test method 8021

mg/kg = milligrams per kilogram

ug/L = micrograms per liter

CPT CLASSIFICATION CHART (after Robertson and Campanella, 1988)

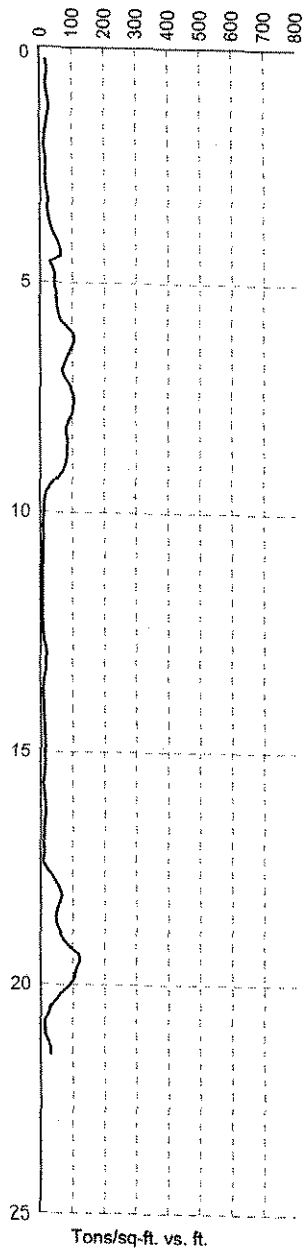


Friction Ratio (R_f) = Sleeve Friction (F_s)/Cone Pressure (Q_c) x 100%
 1 bar \approx 0.9576 tons per square foot (tsf)
 N = Standard penetration value, blows/foot

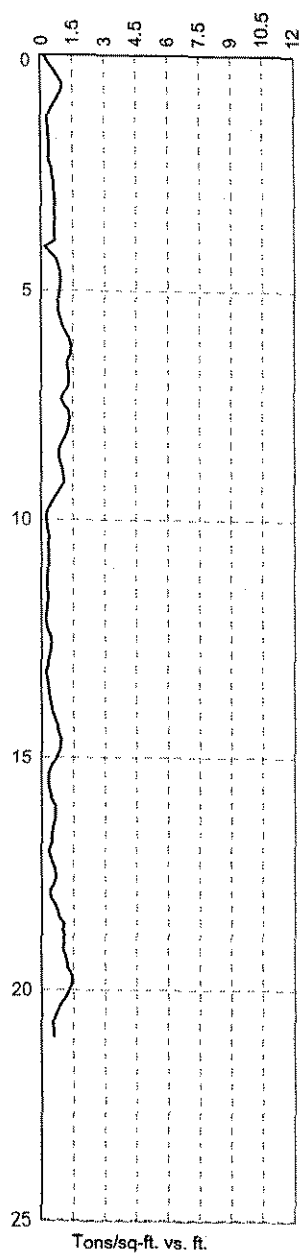
Zone	Q_c/N	Soil Behavior Type
1	2	sensitive fine grained
2	1	organic material
3	1	clay
4	1.5	silty clay to clay
5	2	clayey silt to silty clay
6	2.5	sandy silt to clayey silt
7	3	silty sand to sandy silt
8	4	sand to silty sand
9	5	sand
10	6	gravelly sand to sand
11	1	very stiff fine grained*
12	2	sand to clayey sand*

* overconsolidated or cemented

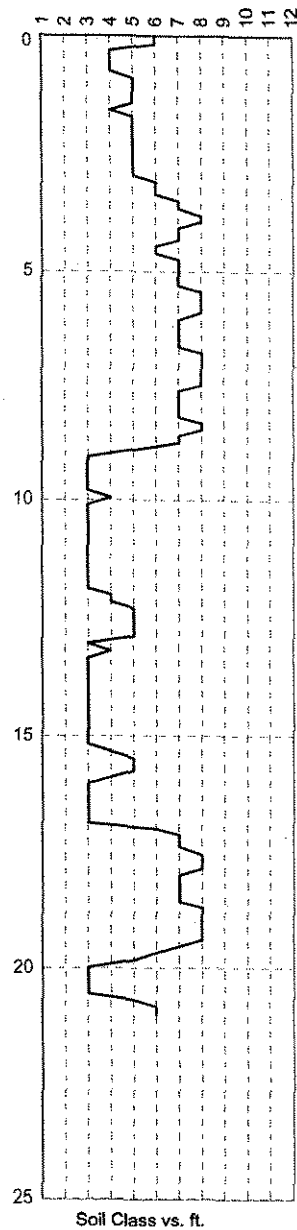
ec-490-01
Qc



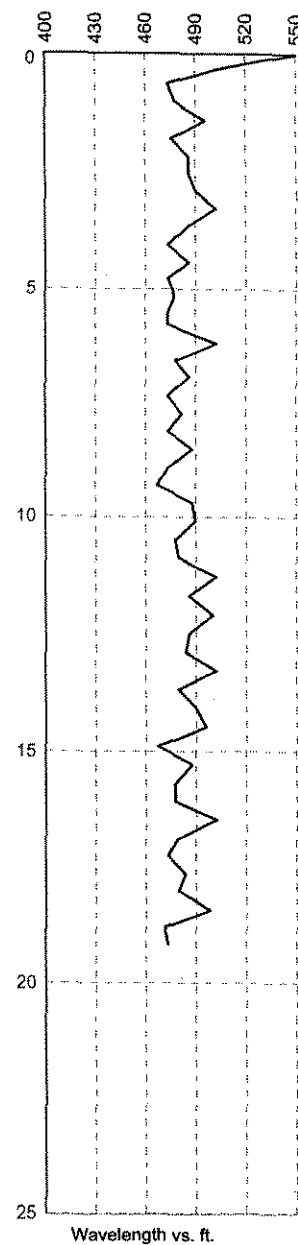
ec-490-01
Qs



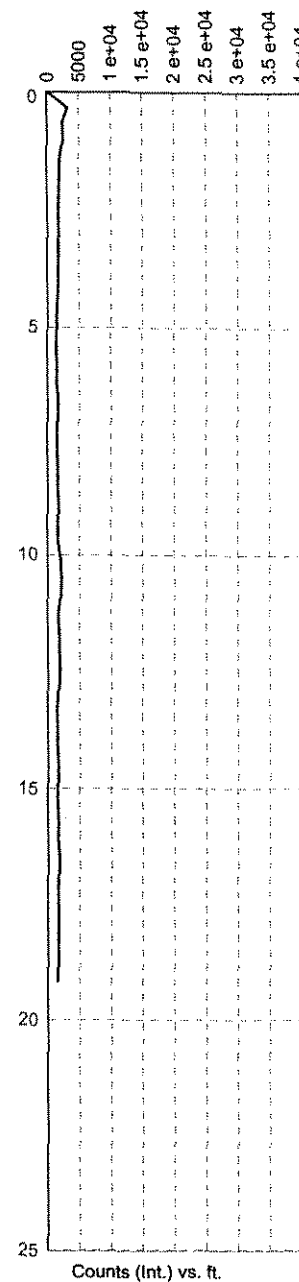
ec-490-01
Soil Class



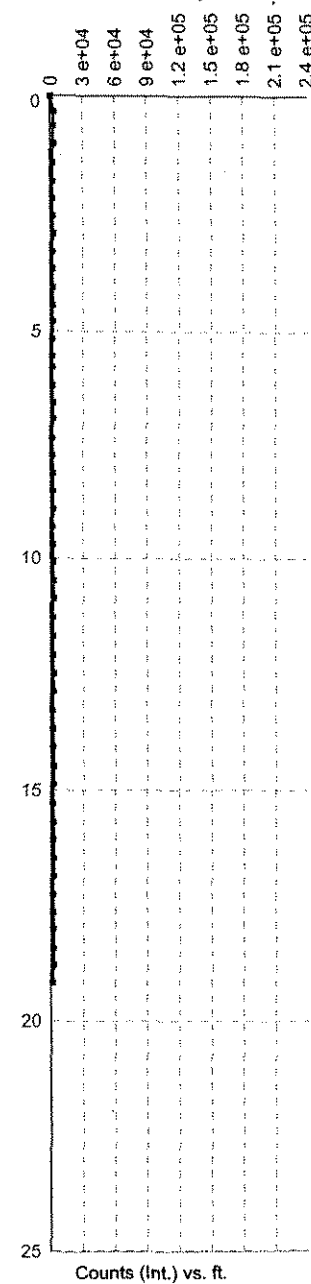
ec-490-01: LIF
Wavelength @ Peak

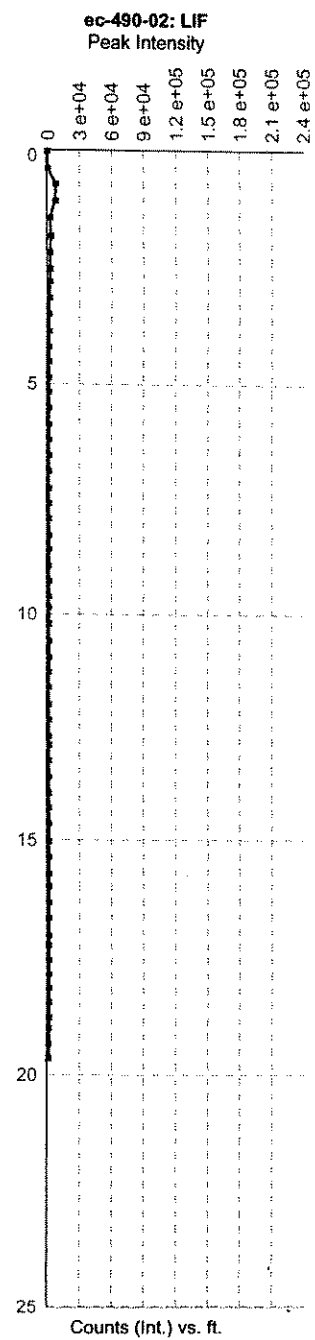
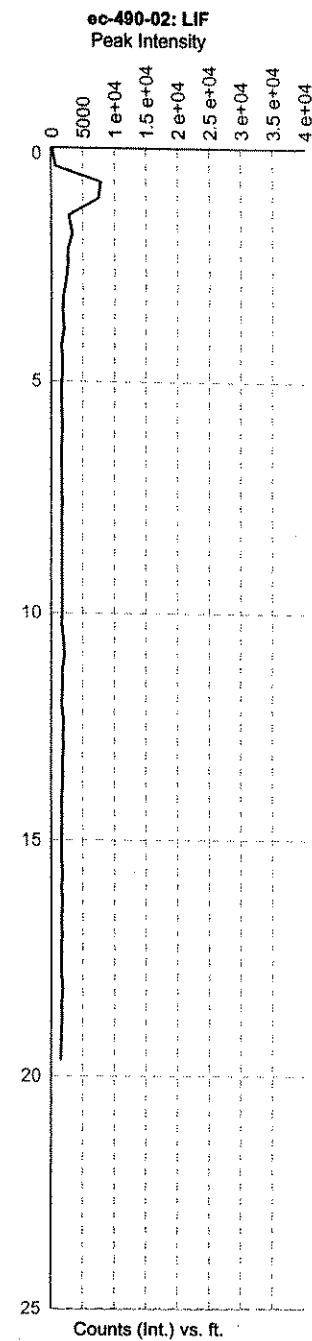
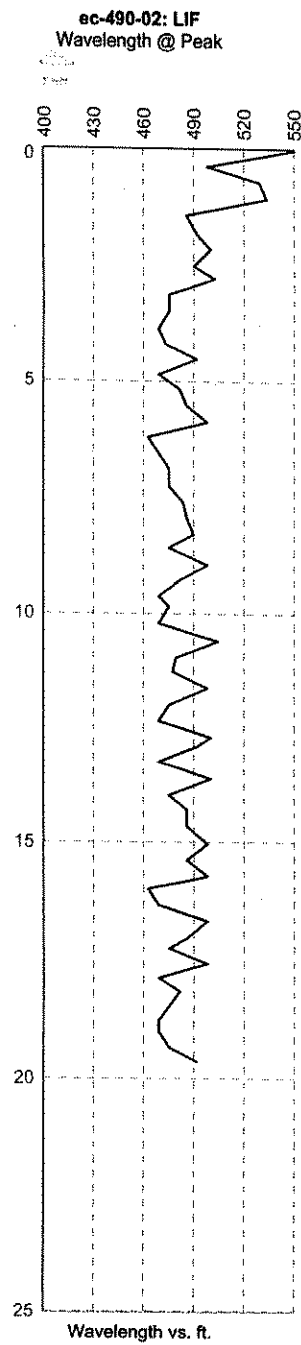
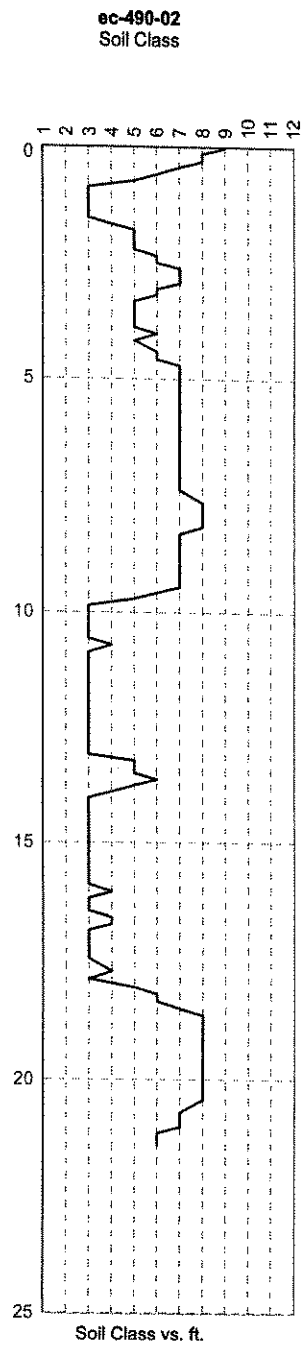
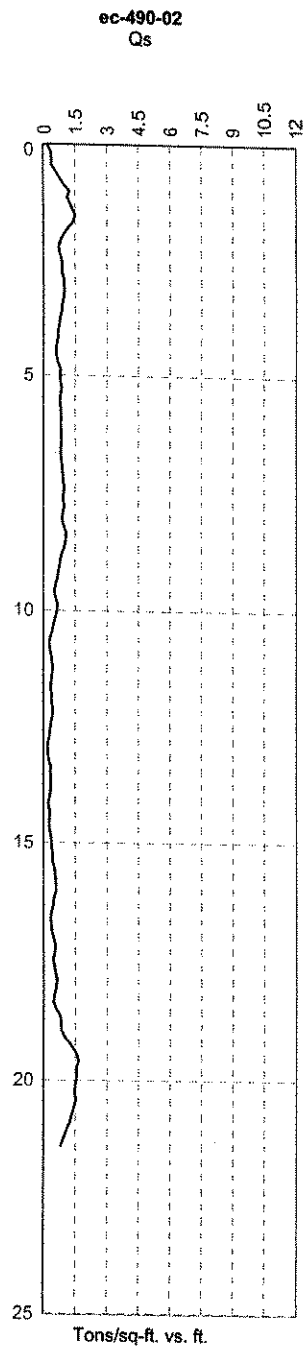
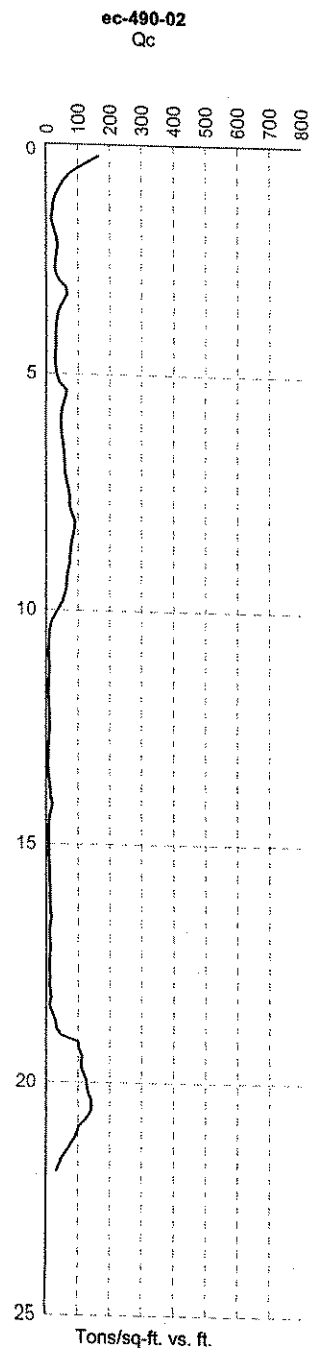


ec-490-01: LIF
Peak Intensity

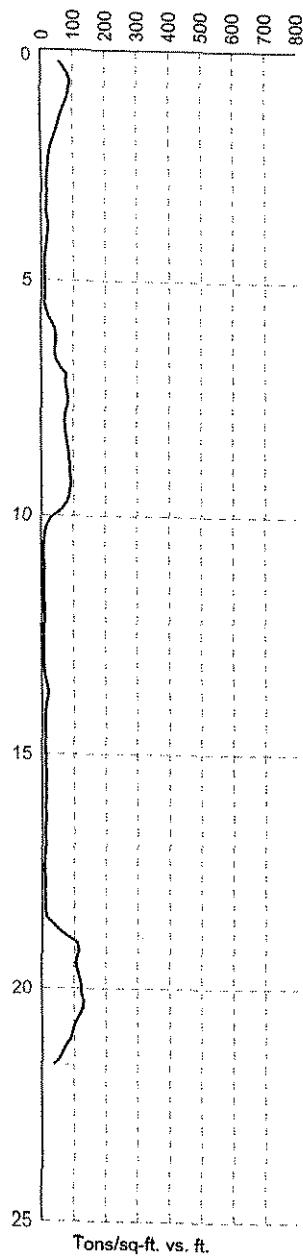


ec-490-01: LIF
Peak Intensity

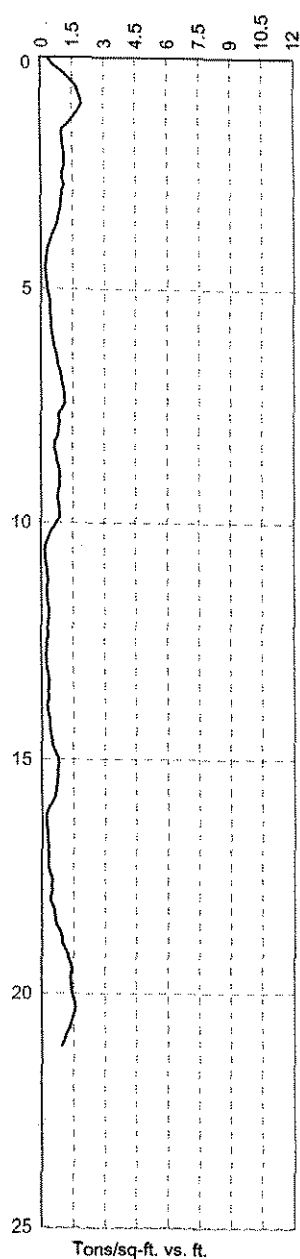




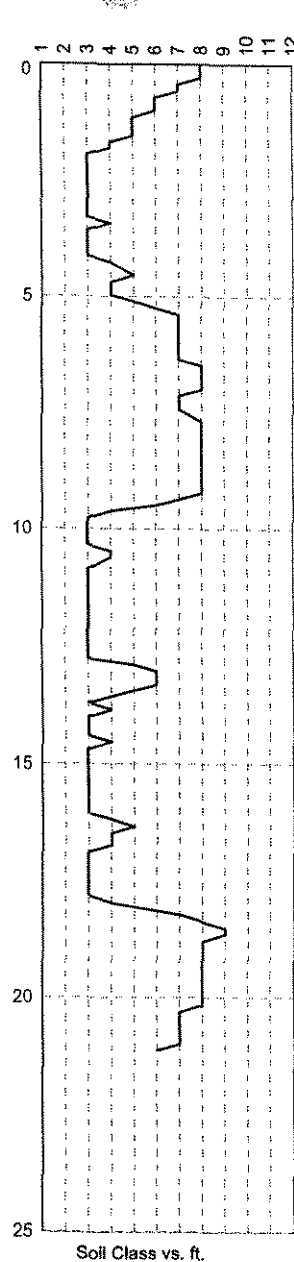
ec-490-03
Qc



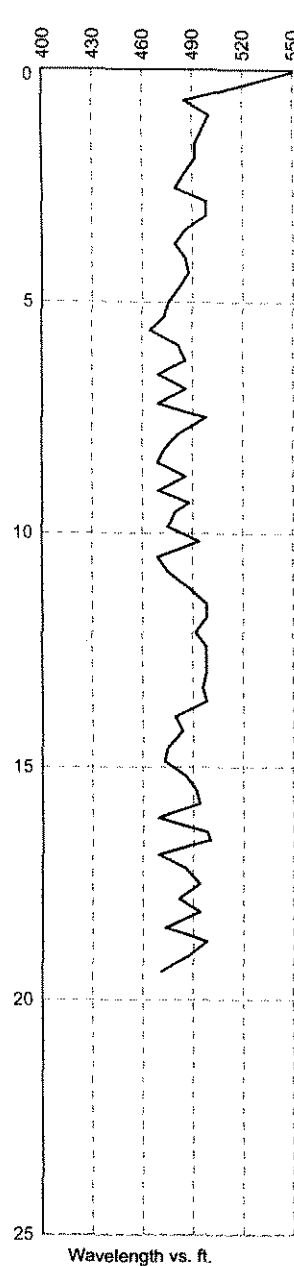
ec-490-03
Qs



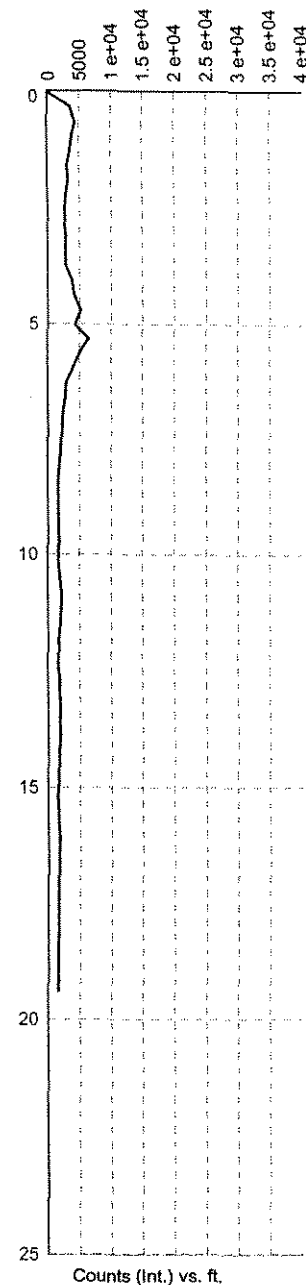
ec-490-03
Soil Class



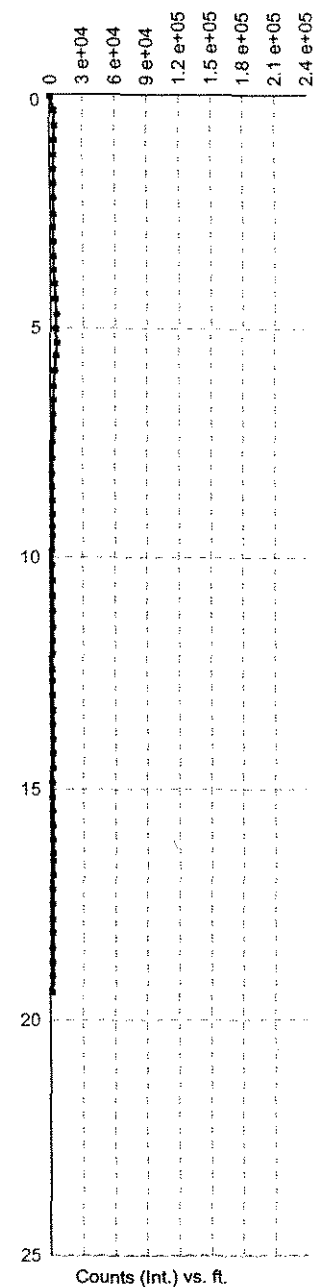
ec-490-03: LIF
Wavelength @ Peak



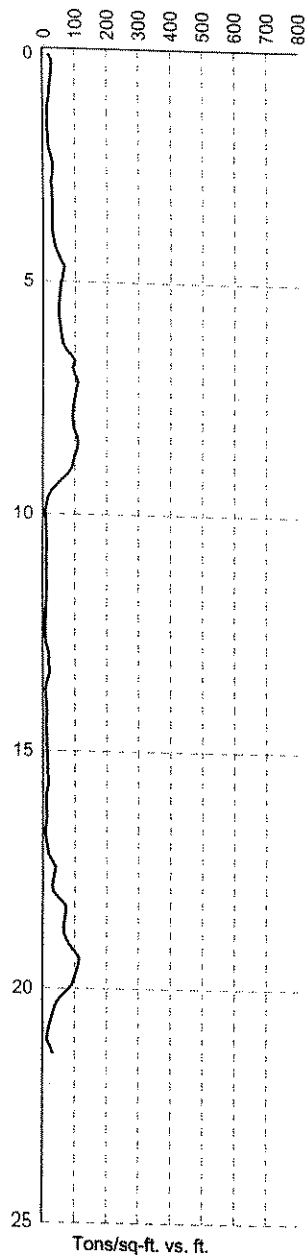
ec-490-03: LIF
Peak Intensity



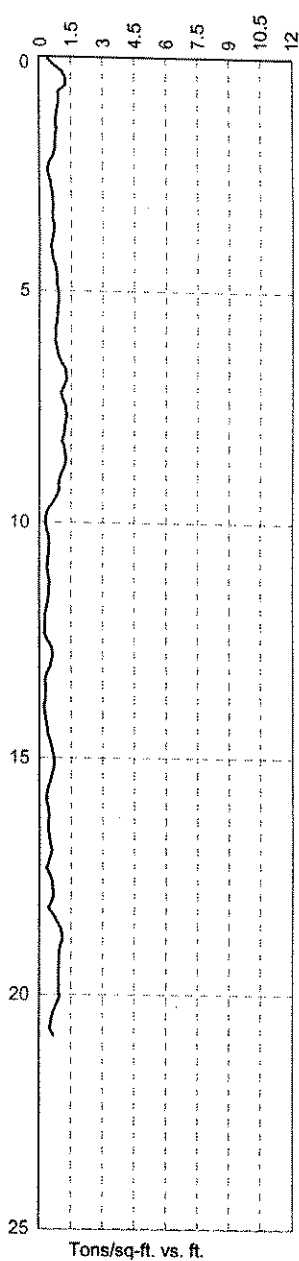
ec-490-03: LIF
Peak Intensity



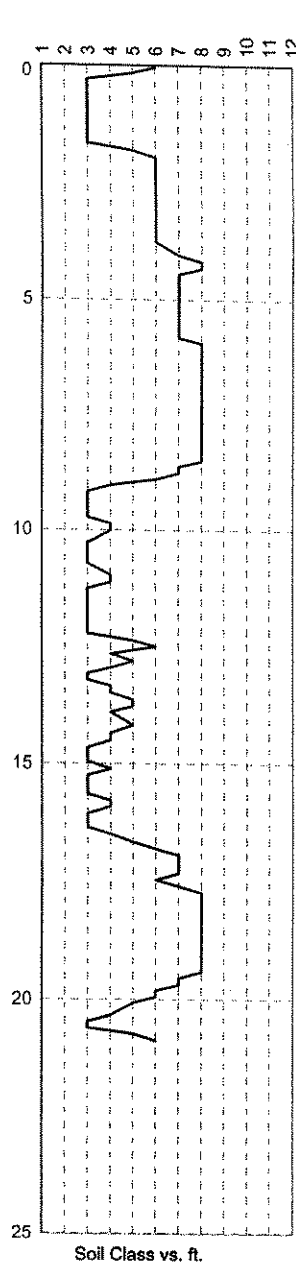
ec-490-04
Qc



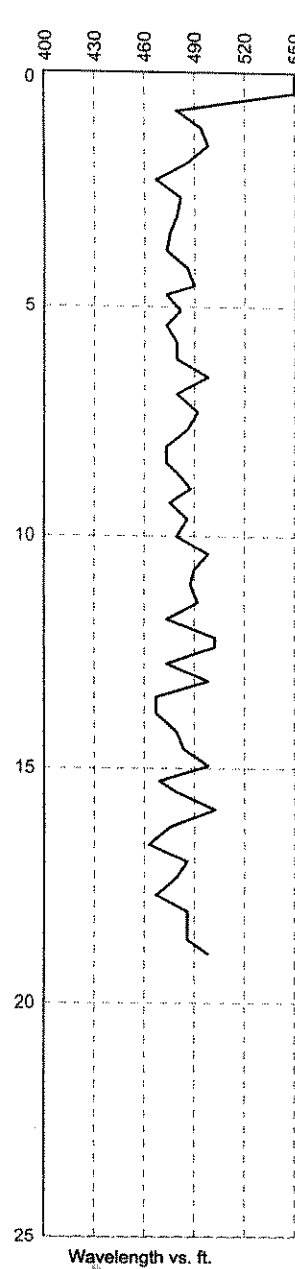
ec-490-04
Qs



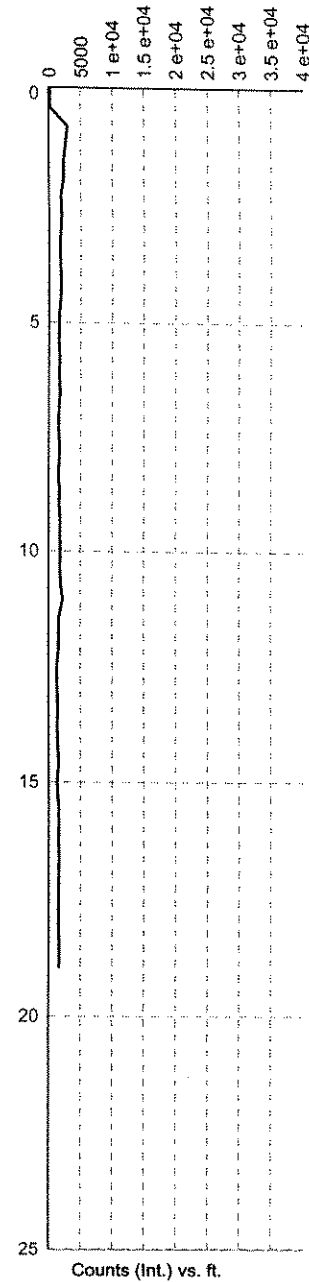
ec-490-04
Soil Class



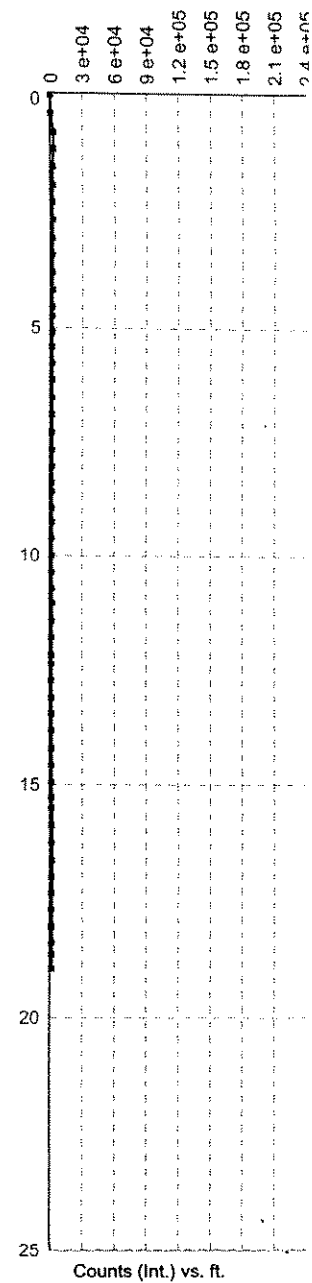
ec-490-04: LIF
Wavelength @ Peak



ec-490-04: LIF
Peak Intensity



ec-490-04: LIF
Peak Intensity



May 20, 2004

Mr. David Bloom
Navy Public Works Center
2730 McKean Street
Suite 1
San Diego, CA 92136-5294

**SUBJECT: DATA REPORT – NAS – SITE 490 – EL CENTRO, CA -
NAVY PWC PROJECT #1113621902008**

H&P Project # NP051104W1

Mr. Bloom:

Please find enclosed a data report for the above referenced location. Samples were analyzed on-site in DOHS certified mobile laboratory (CERT #1317).

Project Summary

The following analyses were conducted:

- 1 soil for total petroleum hydrocarbons (TPH) by DHS LUFT/8015M Method
- 1 water for volatile aromatic hydrocarbons (BTEX) & MTBE by EPA Method 8021B

The samples were received on-site in appropriate containers with appropriate labels, seals, and chain-of-custody documentation.

Project Narrative

The results for all analyses and required QA/QC analyses are summarized in the enclosed tables. All calibrations, blanks, surrogates, and spike recoveries fulfill quality control criteria.

H&P Mobile GeoChemistry appreciates the opportunity to provide analytical services to Navy Public Works Center on this project. If you have any questions relating to this data or report, please do not hesitate to contact us.

Sincerely,


Dr. Blayne Hartman



NAVY PUBLIC WORKS PROJECT #1113621902008
 NAS
 SITE 490
 EL CENTRO, CA

H&P Project #NP051104-W1

TPH (DHS LUFT/ 8015M Method) ANALYSES OF SOILS

SAMPLE NUMBER	DATE ANALYZED	TPH-GAS	TPH-DIESEL
		C5-C11 (mg/kg)	C12-C24 (mg/kg)
METHOD BLANK	5/12/2004	ND	ND
EC-490-3-4.5	5/12/2004	ND	1,300
DETECTION LIMITS		10	10

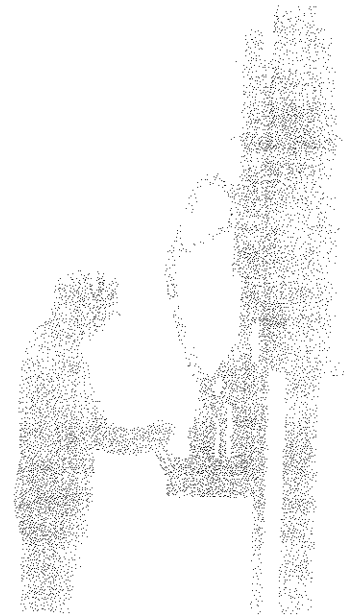
ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
 5-26-2004



NAVY PUBLIC WORKS PROJECT #1113621902008
NAS
SITE 490
EL CENTRO, CA

H&P Project #NP051104-W1

BTEX, MTBE (EPA Method 8020 Modified) ANALYSES OF WATERS

SAMPLE NUMBER	DATE ANALYZED	MTBE (ug/l)	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYLBENZ (ug/l)	XYLENES (ug/l)	SURROGATE (%REC)
METHOD BLANK	5/12/2004	ND	ND	ND	ND	ND	108
EC-490-04-GW	5/12/2004	ND	1.1	ND	ND	ND	100
REPORTING LIMITS		10.0	1.0	1.0	1.0	1.0	53%-145%
DETECTION LIMITS		1.0	0.5	0.5	0.5	0.5	

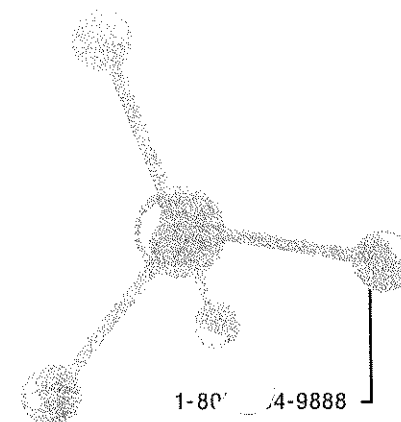
ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
5-26-2004



QA/QC REPORT - LCS/LCSD DATA

LABORATORY CONTROL SAMPLES (LCS & LCSD) FOR SOILS

ANALYSIS DATE: 05/12/2004

H&P Project #NP051104-W1

COMPOUND	SPK CONC (mg/kg)	LCS CONC (mg/kg)	%REC LCS	LCSD CONC (mg/kg)	%REC LCSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
TPH GASOLINE	200	218	109.0%	217	108.5%	0.5%	15%	75% - 125%
TPH DIESEL	500	514	102.8%	510	102.0%	0.8%	15%	75% - 125%

LABORATORY CONTROL SAMPLES (LCS & LCSD) FOR WATERS

ANALYSIS DATE: 05/12/2004

H&P Project #NP051104-W1

COMPOUND	SPK CONC (ug/L)	LCS CONC (ug/L)	%REC LCS	LCSD CONC (ug/L)	%REC LCSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
MTBE	20.0	19.7	98.5%	20.2	101.0%	2.5%	15%	75% - 125%
BENZENE	20.0	17.4	87.0%	17.2	86.0%	1.2%	15%	75% - 125%
TOLUENE	20.0	16.4	82.0%	16.3	81.5%	0.6%	15%	75% - 125%
ETHYLBENZENE	20.0	17.8	89.0%	17.4	87.0%	2.3%	15%	75% - 125%
TOTAL XYLENES	40.0	33.6	84.0%	33.4	83.5%	0.6%	15%	75% - 125%

SPK CONC - CONCENTRATION SPIKED INTO MATRIX

LCS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE

% REC - PERCENT RECOVERY OF SPIKE FROM LAB CONTROL SAMPLE

RPD - RELATIVE PERCENT DIFFERENCE BETWEEN LAB CONTROL AND LAB CONTROL DUPLICATE RECOVERIES

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

QA/QC REPORT - CALIBRATION DATA

H&P Project #NP051104-W1
 DAILY CALIBRATION DATE : 05/12/04

COMPOUND	CALIBRATION RANGE		INITIAL			OPENING			CLOSING / LCS		
	SOIL (ug/kg)	WATER (ug/L)	CALIB DATE	RF	%RSD	AREA	RF	%DIFF	AREA	RF	%DIFF
MTBE	500 - 25	2500 - 125	4/2/2004	3.07	7.2%	291	2.91	5.1%	322	3.22	5.0%
BENZENE	500 - 25	2500 - 125	5/6/2004	9.44	11.6%	1,035	10.35	9.6%	881	8.81	6.7%
TOLUENE	500 - 25	2500 - 125	5/6/2004	17.80	12.5%	1,710	17.10	4.0%	1,558	15.58	12.5%
TFT	500 - 25	2500 - 125	5/6/2004	5.49	9.8%	582	5.82	6.1%	604	6.04	10.1%
ETHYLBENZENE	500 - 25	2500 - 125	5/6/2004	15.77	5.6%	1,584	15.84	0.5%	1,391	13.91	11.8%
m&p-XYLENES	500 - 25	2500 - 125	5/6/2004	20.54	8.8%	1,925	19.25	6.3%	1,747	17.47	15.0%
o-XYLENES	500 - 25	2500 - 125	5/6/2004	16.61	7.7%	1,592	15.92	4.1%	1,530	15.30	7.9%

INITIAL RF - AVERAGE RESPONSE FACTOR FROM MULTIPOINT CALIBRATION CURVE
 % RSD - LINEARITY OF MULTIPOINT CALIBRATION CURVE (+/- 20% ACCEPTABLE LIMITS)
 AREA - AREA COUNTS FROM DAILY CALIBRATION STANDARD
 RF - DETECTOR RESPONSE FACTOR FROM MID-POINT CALIBRATION STANDARD
 % DIFF - DIFFERENCE, IN PERCENT, BETWEEN THE AVERAGE RF AND THE OPENING OR CLOSING RF
 OPENING - MID-POINT CALIBRATION STANDARD ANALYZED BEFORE SAMPLE ANALYSES BEGIN
 CLOSING - MID-POINT CALIBRATION STANDARD ANALYZED AFTER SAMPLES ANALYSES ARE COMPLETE

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
 ANALYSES PERFORMED BY: MS. JANIS VILLARREAL
 DATA REVIEWED BY: DR. BLAYNE HARTMAN

QA/QC REPORT - MS/MSD DATA

MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD) FOR SOILS

ANALYSIS DATE : 05/12/04

H&P Project #NP051104-W1

COMPOUND	SPK CONC (mg/kg)	MS CONC (mg/kg)	%REC MS	MSD CONC (mg/kg)	%REC MSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
TPH GASOLINE	200	211	105.5%	229	114.5%	8.2%	15%	75% - 125%
TPH DIESEL	600	639	106.5%	613	102.2%	4.2%	15%	75% - 125%

SPK CONC - CONCENTRATION SPIKED INTO MATRIX

MS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE

% REC - PERCENT RECOVERY OF SPIKE FROM MATRIX

RPD - RELATIVE PERCENT DIFFERENCE BETWEEN MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

QA/QC REPORT - MS/MSD DATA

MATRIX SPIKE (MS)/MATRIX SPIKE DUPLICATE (MSD) FOR WATERS

ANALYSIS DATE : 05/12/04

H&P Project #NP051104-W1

COMPOUND	SPK CONC (ug/L)	MS CONC (ug/L)	%REC MS	MSD CONC (ug/L)	%REC MSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
MTBE	20.0	17.8	89.0%	19.8	99.0%	10.6%	15%	75% - 125%
BENZENE	20.0	17.9	89.5%	19.8	99.0%	10.1%	15%	75% - 125%
TOLUENE	20.0	16.1	80.5%	16.3	81.5%	1.2%	15%	75% - 125%
ETHYLBENZENE	20.0	17.8	89.0%	18.5	92.5%	3.9%	15%	75% - 125%
TOTAL XYLENES	40.0	34.2	85.5%	34.8	87.0%	1.7%	15%	75% - 125%

SPK CONC - CONCENTRATION SPIKED INTO MATRIX

MS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE

% REC - PERCENT RECOVERY OF SPIKE FROM MATRIX

RPD - RELATIVE PERCENT DIFFERENCE BETWEEN MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

QA/QC REPORT - LCS/LCSD DATA

LABORATORY CONTROL SAMPLES (LCS & LCSD) FOR SOILS

ANALYSIS DATE: 05/12/2004

H&P Project #NP051104-W1

COMPOUND	SPK CONC (mg/kg)	LCS CONC (mg/kg)	%REC LCS	LCSD CONC (mg/kg)	%REC LCSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
TPH GASOLINE	200	218	109.0%	217	108.5%	0.5%	15%	75% - 125%
TPH DIESEL	500	514	102.8%	510	102.0%	0.8%	15%	75% - 125%

LABORATORY CONTROL SAMPLES (LCS & LCSD) FOR WATERS

ANALYSIS DATE: 05/12/2004

H&P Project #NP051104-W1

COMPOUND	SPK CONC (ug/L)	LCS CONC (ug/L)	%REC LCS	LCSD CONC (ug/L)	%REC LCSD	RPD	ACCEPTABLE RPD	ACCEPTABLE RECOVERY
MTBE	20.0	19.7	98.5%	20.2	101.0%	2.5%	15%	75% - 125%
BENZENE	20.0	17.4	87.0%	17.2	86.0%	1.2%	15%	75% - 125%
TOLUENE	20.0	16.4	82.0%	16.3	81.5%	0.6%	15%	75% - 125%
ETHYLBENZENE	20.0	17.8	89.0%	17.4	87.0%	2.3%	15%	75% - 125%
TOTAL XYLENES	40.0	33.6	84.0%	33.4	83.5%	0.6%	15%	75% - 125%

SPK CONC - CONCENTRATION SPIKED INTO MATRIX

LCS CONC - ANALYZED CONCENTRATION OF SPIKED SAMPLE

% REC - PERCENT RECOVERY OF SPIKE FROM LAB CONTROL SAMPLE

RPD - RELATIVE PERCENT DIFFERENCE BETWEEN LAB CONTROL AND LAB CONTROL DUPLICATE RECOVERIES

ANALYSES PERFORMED IN CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)

ANALYSES PERFORMED BY: MS. JANIS VILLARREAL

DATA REVIEWED BY: DR. BLAYNE HARTMAN

Chain of Custody Record

Site 490

Date: 5-12-04

☐ 148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469

☒ 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404

☐ 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

H&P Project # NP05 1104W1

Outside Lab: _____

Client: NAVY Public Works Code 980
Address: 2730 Mc Kean St. Suite 1
SD CA
Phone: 619-524-6967 Fax: 619-524-6000

Collector: D Bloom Page: 1 Of 6
Client Project # 1136 219 62008 Project Manager D. Bloom
Location: NAS El Centro Site 490
Turn around time: _____

Global ID: T060254471

EDF: ☒ Yes ☐ No

Sample Receipt

Intact: ☐ Yes ☐ NoSeal Intact: ☐ Yes ☐ No ☐ N/ACold: ☐ Yes ☐ No

N/A (Received on Site)

[illegible]

Relinquished by: (Signature)

(company)

Received by: (Signature)

(company)

Date:

Time

Relinquished by: (Signature)

(company)

Received by: (Signature)

{company

Date:

Time

Relinquished by: (Signature)

(company)

Received by: (Signature)

(compan

Date: _____

Time

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal (continued)

☐ Disposal @ \$2.00 each☐ *Return to client*☐ Pickup

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-492
Site Address: Located at the west side of Building 492, which is just east of IR Site 8 and south of Patrol Road, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T2243 00 72

Date spill/leak reported to regulatory agency: 1993 (estimated)
Estimated date discharge/leak was discovered: 1993
How discharge/leak was discovered: Tank removal in 1993
Cause of discharge/leak: Leaking UST
Start date for active remediation: Tank removed in 1993
Completion date for active remediation: Tank removed in 1993

	Easting	Northing
Coordinates for tank:	6736381.00000	1882893.00000

Dates for sample analysis: 1993 and January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 18.5 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs
Remedial action taken?	Yes. UST was removed in 1993


Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan?	Yes
Remedial action taken?	Yes. UST was removed in 1993

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature  Date 1/25/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature  Date 1/19/08

FOR
Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-513
Site Address: Located in a paved parking lot north of 8th Street between Buildings 512 and 513, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430073

Date spill/leak reported to regulatory agency: February 1999 (estimated)
Estimated date discharge/leak was discovered: February 1999
How discharge/leak was discovered: Field investigation, February 1999
Cause of discharge/leak: Leaking UST
Start date for active remediation: February 1999
Completion date for active remediation: February 1999

	Easting	Northing
Coordinates for tank:	6741982.00000	1876429.62500

Dates for sample analysis: February 1999 and April 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not estimated

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 14.5 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs
Remedial action taken?	Yes. UST and contaminated soil were removed in February 1999

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. UST and contaminated soil were removed in February 1999

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 9 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature




Date 1/25/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Date 1/19/05

FOR
Liann P. Chavez, R.G. 
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-526
Site Address: Located south of 8th Street on the southeast side of Building 526, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tank:	6742332.00000	1876157.62500

Dates for sample analysis: January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Investigations found no evidence of a tank at this location and soil analytical results were nondetect

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 14.5 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs
Remedial action taken?	Not applicable. No evidence of a tank or soil contamination identified at this location

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?	Not applicable. No evidence of a tank or soil contamination identified at this location
------------------------	---

Site Closure: Because no evidence of a tank was identified at this location and no contaminants are reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

1/10/05

Signature

Liann P. Chavez Date 5-17-04

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer



NAVAL AIR FACILITY EL CENTRO

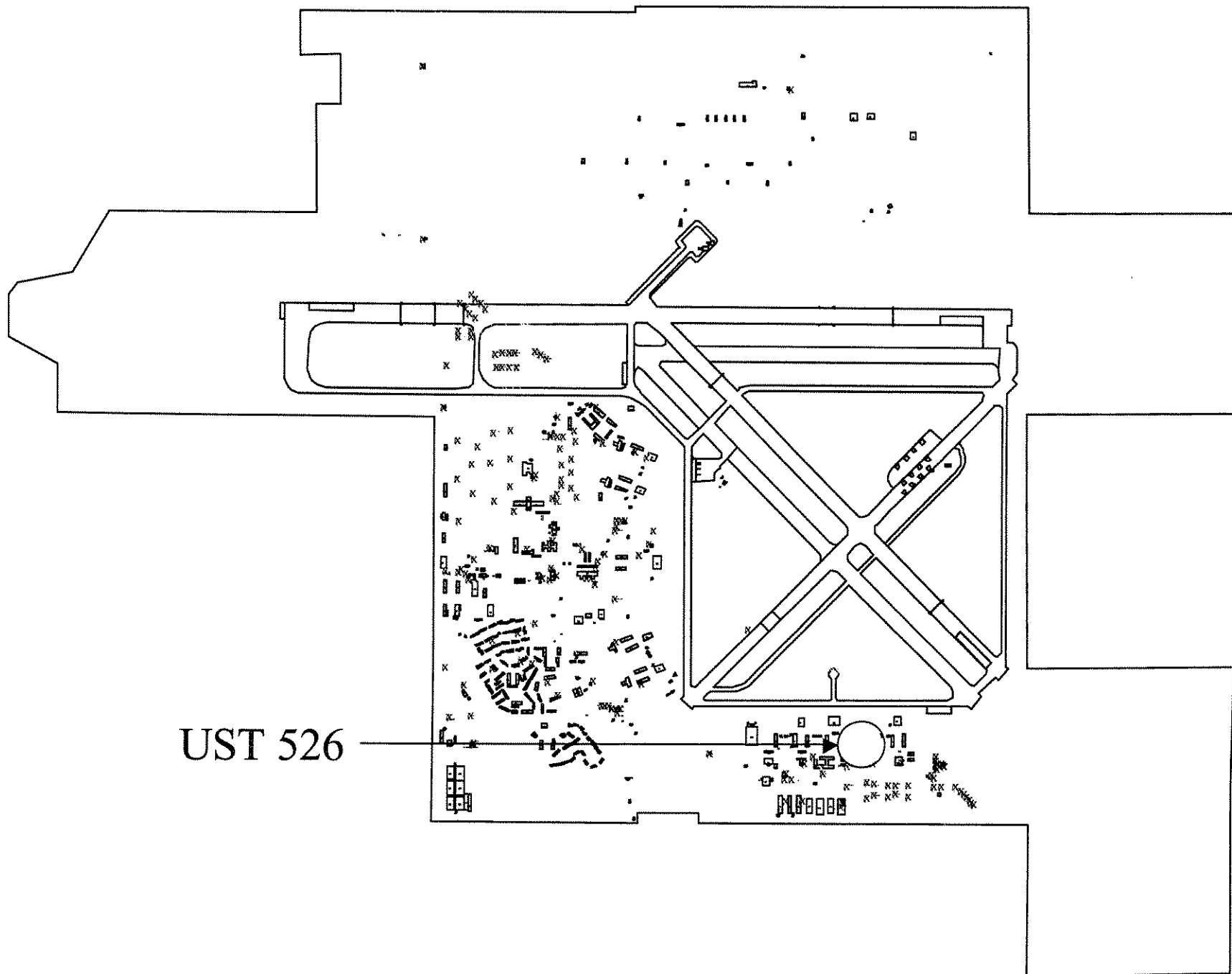


UST 526:

1,400 gallon fuel UST – unknown construction

Removed – unknown. Identified on basis of historical records, but no tank identified at this location. Potholing with a backhoe in 2003 also failed to identify a tank or soil contamination at this location

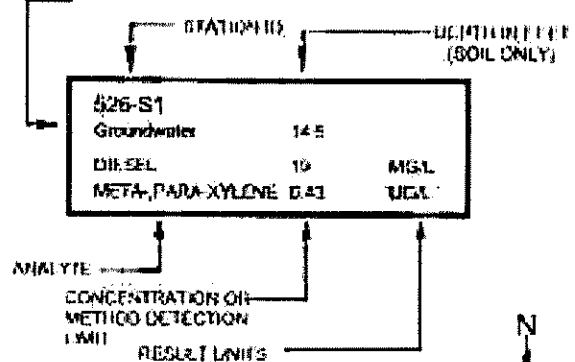
Recommended for Closure – BNI Tech Memo 2



UST 526

LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORING / HYDROPUNCH SAMPLING LOCATIONS
- FENCE
- WET DRAIN
- CULVERT
- ROAD
- BUILDINGS
- SAMPLE TYPE: SOIL OR GROUNDWATER



NOTES:
 UGL = MICROGRAMS PER LITER
 MSL = MILLIGRAMS PER LITER
 MCKG = MILLIGRAMS PER KILOGRAM

50 0 50 Feet

UST
526

526-S1				
Groundwater				
14.5-111				
DIESEL	19	MSL		
META-PARA-XYLENE	0.43	UGL		
TOXUENE	0.51	UGL		

UST Investigation TM Addendum

Figure 4-32

Site Map - UST 526

NAFEL Centro, Imperial Valley, California



Bechtel National, Inc.
 CLEAN II Program

Date: 11/27/00
 File No: 175L0123
 Job No: 22214-175
 Rev No: C

Analytical Results for Underground Storage Tank 526

Sample Number	Location	Depth (feet bgs)	TPH as Diesel*	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)									
175S108	526-S1	9.2 – 9.8	32 U	52 U	78 U	52 U	100 U	52 U	130 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)									
175HP65	526-S1	14.5 – 18	19	0.2 U	0.51	0.2 U	0.43	0.2 U	0.5 U

Note:

* TPH as diesel results reported in milligrams per kilogram for soil and milligrams per liter for groundwater (parts per million)

Acronyms/Abbreviations:

bgs – below ground surface
 BNI – Bechtel National, Inc.
 µg/kg – micrograms per kilogram
 µg/L – micrograms per liter
 MTBE – methyl-tert-butyl ether
 TPH – total petroleum hydrocarbons

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-534
Site Address: Located in an open dirt area north of Seventh Street, Naval Air Facility
El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, -Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: _____

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	No discharge/leak identified
How discharge/leak was discovered:	No discharge/leak identified
Cause of discharge/leak:	No discharge/leak identified
Start date for active remediation:	Tank removed in 1990
Completion date for active remediation:	Tank removed in 1990

	Easting	Northing
Coordinates for tank:	6741272.00000	1875953.25000

Dates for sample analysis: January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Analytical results for soil were nondetect

Estimated volume of contaminated soil left on site and concentration: None

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 14.5 feet below ground surface

Is groundwater or surface water impacted? No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken? Yes. UST was removed in 1990

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. UST was removed in 1990

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature  Date 1/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature  Date 5-17-07

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



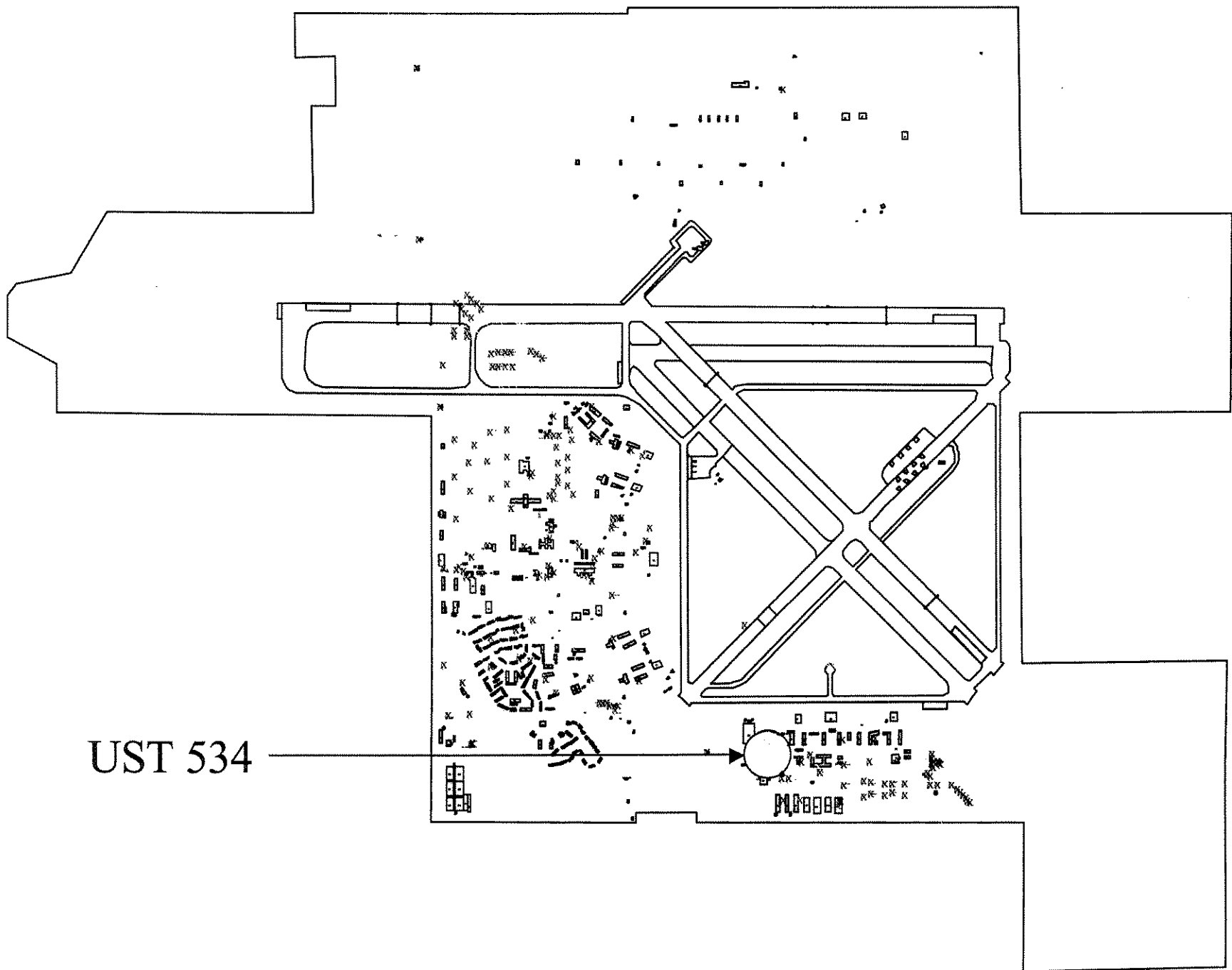
UST 534:

1,400 gallon concrete diesel UST

Removed 1990

Recommended for Closure – BNI Tech Memo 2

UST 534



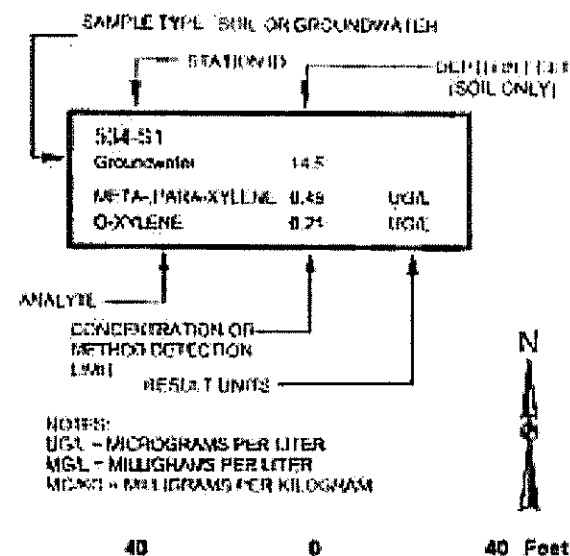
533

UST
534

534-S1		
Groundwater	14.5	
META-PARA-XYLENE	0.49	UG/L
O-XYLENE	0.21	UG/L
TOLUENE	0.6	UG/L

LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORING - HYDRO-PNEUMATIC SAMPLING LOCATIONS
- FENCE
- WET DRAIN
- CULVERT
- ROADS
- BUILDINGS



UST Investigation TM Addendum

Figure 4-34

Site Map - UST 534

NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
CLEAN II Program

Date: 11/27/00
 File No: 175LD129
 Job No: 22214-175
 Rev No: C

Analytical Results for Underground Storage Tank 534

Sample Number	Location	Depth (feet bgs)	TPH as Diesel*	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)									
175S111	534-S1	7.5 – 8	35 U	56 U	85 U	56 U	110 U	56 U	140 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)									
175HP68	534-S1	14.5 – 18	0.25 U	0.2 U	0.6	0.2 U	0.49	0.21	0.5 U

Note:

* TPH as diesel results reported in milligrams per kilogram for soil and milligrams per liter for groundwater (parts per million)

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

MTBE – methyl-tert-butyl ether

TPH – total petroleum hydrocarbons

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

RECEIVED
FEB 06 2004
REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-540 A N
Site Address: Located in an open area east of G Street, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DOOT22430074

Date spill/leak reported to regulatory agency: December 1994
Estimated date discharge/leak was discovered: December 1994
How discharge/leak was discovered: Field Investigation, December 1994
Cause of discharge/leak: Leaking UST
Start date for active remediation: December 22, 1994
Completion date for active remediation: January 30, 1995

	Easting	Northing
Coordinates for tank:	6741999.00000	1876108.25000

Dates for sample analysis: December 1994 and January 1995

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not estimated

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 16 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. Contaminated soil was excavated in December 1994

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 14 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature

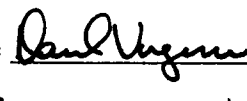


Date

1/25/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature



Date

1/19/06

FOR
Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-540 B S
Site Address: Located on the northeast corner of intersection between Seventh and G Streets, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000122430075

Date spill/leak reported to regulatory agency: March 1995
Estimated date discharge/leak was discovered: March 1995
How discharge/leak was discovered: Field Investigation, March 1995
Cause of discharge/leak: Leaking UST
Start date for active remediation: March 16, 1995
Completion date for active remediation: May 19, 1995

	Easting	Northing
Coordinates for tank:	6741997.00000	1875861.25000

Dates for sample analysis: March/April 1995

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Groundwater analytical results were all nondetect

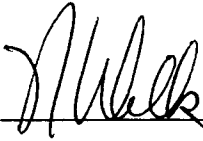
Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 12 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater were all nondetect
Remedial action taken?	Yes. Contaminated soil was excavated in March 1995

Closure


Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Contaminated soil was excavated in March 1995

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature  Date 1/25/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature  Date 1/13/05
FOR

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-545 (D)
Site Address: Located on the north side of Seventh Street between G and E Streets,
Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000T22430016

Date spill/leak reported to regulatory agency: January 1995
Estimated date discharge/leak was discovered: January 1995
How discharge/leak was discovered: Field Investigation, January 1995
Cause of discharge/leak: Leaking UST
Start date for active remediation: January 9, 1995
Completion date for active remediation: March 16, 1995

	Easting	Northing
Coordinates for tank:	6742637.50000	1875879.50000

Dates for sample analysis: January/February 1995

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: Not analyzed (tank contained diesel fuel)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated


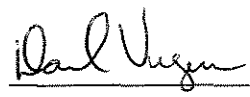
Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 15 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs
Remedial action taken?	Yes. Contaminated soil was excavated in January 1995


Closure

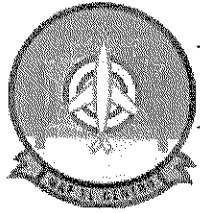
Does complete corrective action protect beneficial uses per the RWQCB Basin Plan?	Yes
Remedial action taken?	Yes. Contaminated soil was excavated in January 1995

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 11 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature 	Date <u>6/7/05</u>	Signature 	Date <u>2/19/05</u>
---	--------------------	--	---------------------

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

 For
Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



UST 545 (D)

1,400 gallon concrete diesel UST

Removed -1993

Recommended for Closure – OHM 1995

RECEIVED
FEB 06 2004
REGION 7

UST 545 (D)

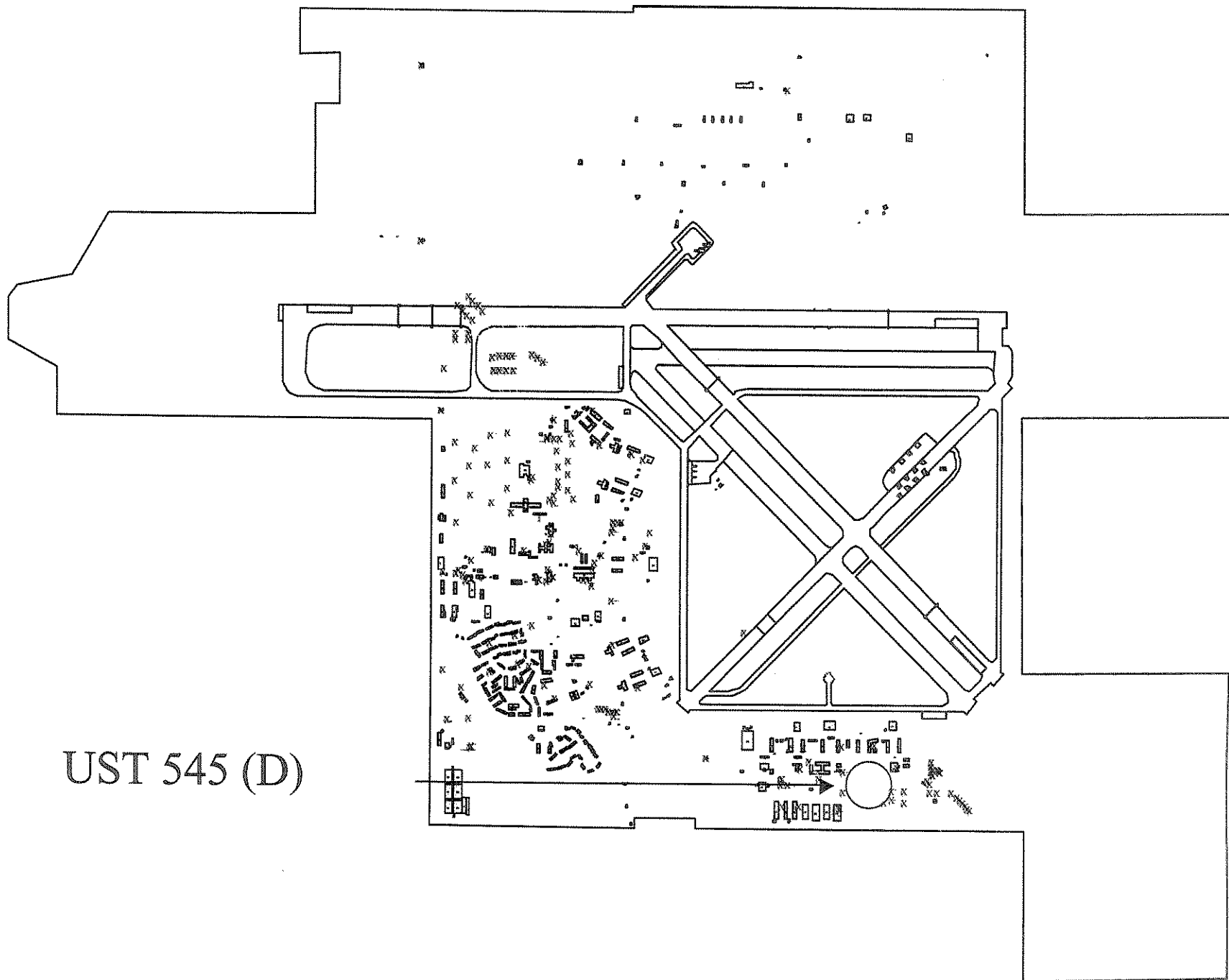


TABLE 5-14
SITE D ANALYTICAL RESULTS

SW1056

EXCAVATION CONFIRMATION:

Date Sampled	Field ID/ Location	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1/12/95	D-EW,S,7/EW	7'	SOIL	ND	ND	ND	ND	ND	ND
1/12/95	D-NEW,S,7/B	7'	SOIL	ND	ND	ND	ND	ND	410
1/12/95	D-EBW,S,9/B	9'	SOIL	ND	ND	ND	ND	ND	ND
1/18/95	D-NW,10,002/NW	10'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	D1/B	18'	SOIL	ND	ND	ND	ND	3	43
2/15/95	D2/SW	18'	SOIL	ND	ND	ND	0.12	43	ND
2/15/95	D3/B	18'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	D4/SW	18'	SOIL	ND	ND	ND	ND	ND	ND
2/15/95	D6/B	18'	SOIL	ND	ND	0.035	0.16	76	430
2/16/95	D9/B	18'	SOIL	ND	ND	ND	ND	19	250
2/16/95	D11/B	18'	SOIL	ND	ND	ND	ND	5.5	13
2/16/95	D14/B	18'	SOIL	ND	ND	ND	ND	ND	ND
2/17/95	D15/NW	10'	SOIL	ND	ND	ND	ND	ND	ND
2/17/95	D20/B	13'	SOIL	ND	ND	ND	ND	13	270
2/20/95	D22/NW	15'	SOIL	ND	ND	ND	0.048	43	480
2/20/95	D23/NW	16'	SOIL	ND	ND	ND	ND	3	35
2/20/95	D25/B	16'	SOIL	ND	ND	ND	ND	5	20
2/20/95	D28/SW	17'	SOIL	ND	ND	ND	ND	ND	ND
2/21/95	D29/WW	16'	SOIL	ND	ND	ND	ND	ND	ND
2/21/95	D32/NW	10'	SOIL	ND	ND	ND	ND	13	370
2/21/95	D33/B	16'	SOIL	ND	ND	ND	ND	ND	ND
2/21/95	D34/NW	10'	SOIL	ND	ND	ND	ND	30	420
2/21/95	D35/NW	10'	SOIL	ND	ND	ND	ND	50	350
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

OVERBURDEN:

Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Gasoline	Diesel
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
2/12/95	BFD	-	SOIL	ND	ND	ND	ND	ND	ND
2/14/95	D-COMP	10'	SOIL	ND	ND	0.11	0.13	72	300
Clean-up Level (mg/kg)			SOIL	1.4	1.9E3	6.9E2	9.9E2	100	1000

TABLE 5-14
SITE D ANALYTICAL RESULTS
(Continued)

SW1056

PERCHED WATER:

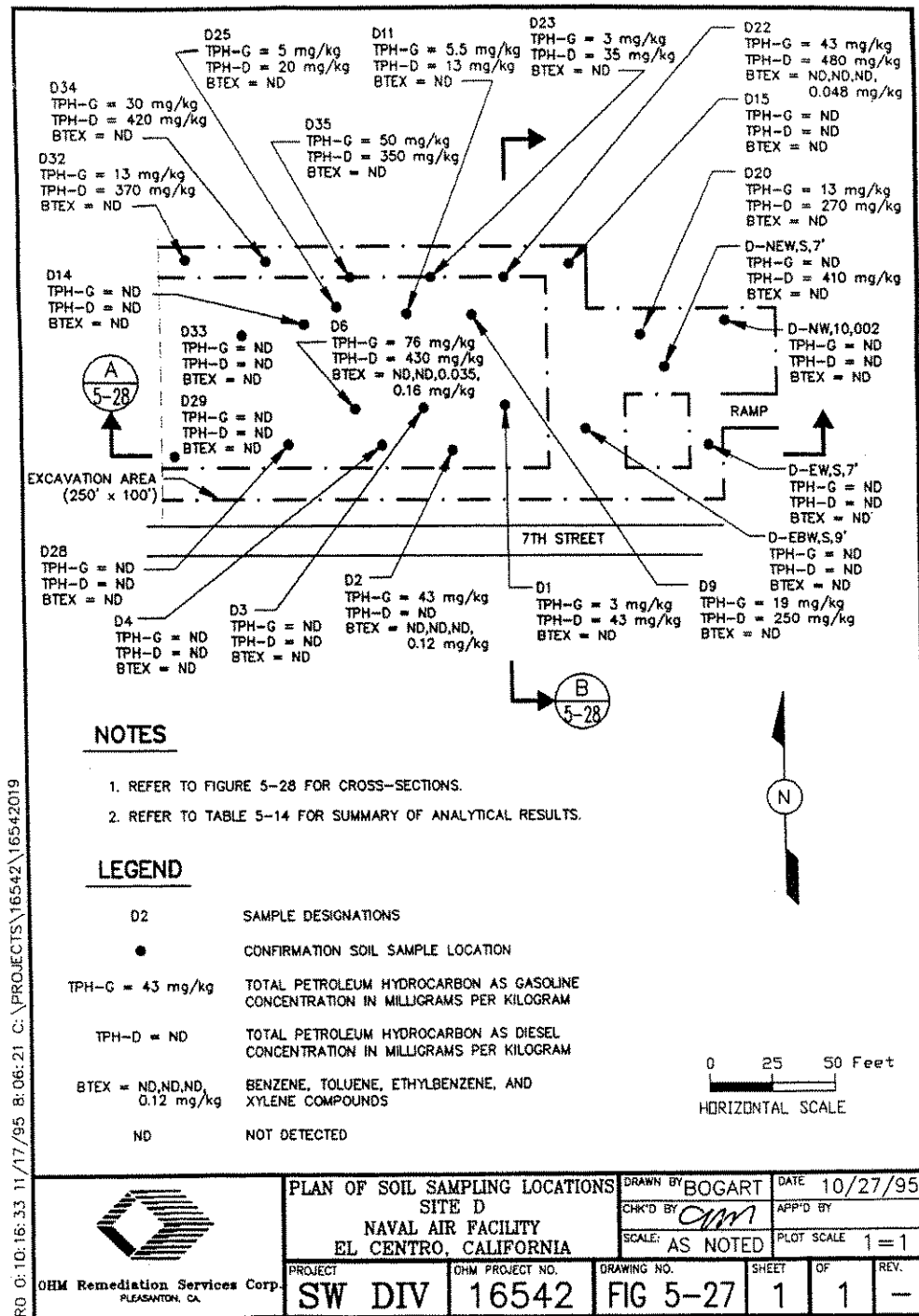
Date Sampled	Field ID	Depth (ft)	Sample Matrix	VOCs (EPA 8020)				TPH (M8015)	
				Benzene mg/l	Toluene mg/l	Ethyl- Benzene mg/l	Total Xylenes mg/l	Gasoline mg/l	Diesel mg/l
2/15/95	DW	15'	WATER	ND	ND	ND	ND	ND	NR
2/20/95	DW-2/20	-	WATER	ND	ND	ND	ND	0.053	ND
PRGs for Tap Water (mg/l)			WATER	3.9E-4	0.720	1.3	1.4	---	---

NOTES:

NR: Not Reported
ND: Not Detected
WW: West Wall
NW: North Wall
SW: South Wall
EW: East Wall
B: Bottom

The clean-up levels for BTEX in the soil are EPA Region IX PRGs for residential soil (September 1, 1995).

RD 0:10:16:33 11/17/95 B:06:21 C:\PROJECTS\16542\16542019



TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-546
Site Address: Located in an open dirt area north of Seventh Street, Naval Air Facility
El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: NO SPILL AT THIS SITE

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	No discharge/leak identified
How discharge/leak was discovered:	No discharge/leak identified
Cause of discharge/leak:	No discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tank:	6742793.50000	1875880.87500

Dates for sample analysis: January 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. No evidence of a UST or soil contamination identified at this location

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted?

No monitoring wells were installed for the UST investigation

Depth to groundwater:

Approximately 12.5 feet below ground surface

Is groundwater or surface water impacted?

No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken?

No. No evidence of a UST or soil contamination identified at this location

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

No. No evidence of a UST or soil contamination identified at this location

Site Closure: Due to the unconfirmed historical presence of a UST and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-29-05

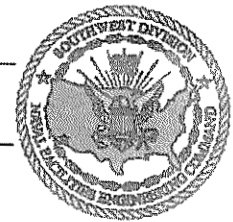
N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

2)

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

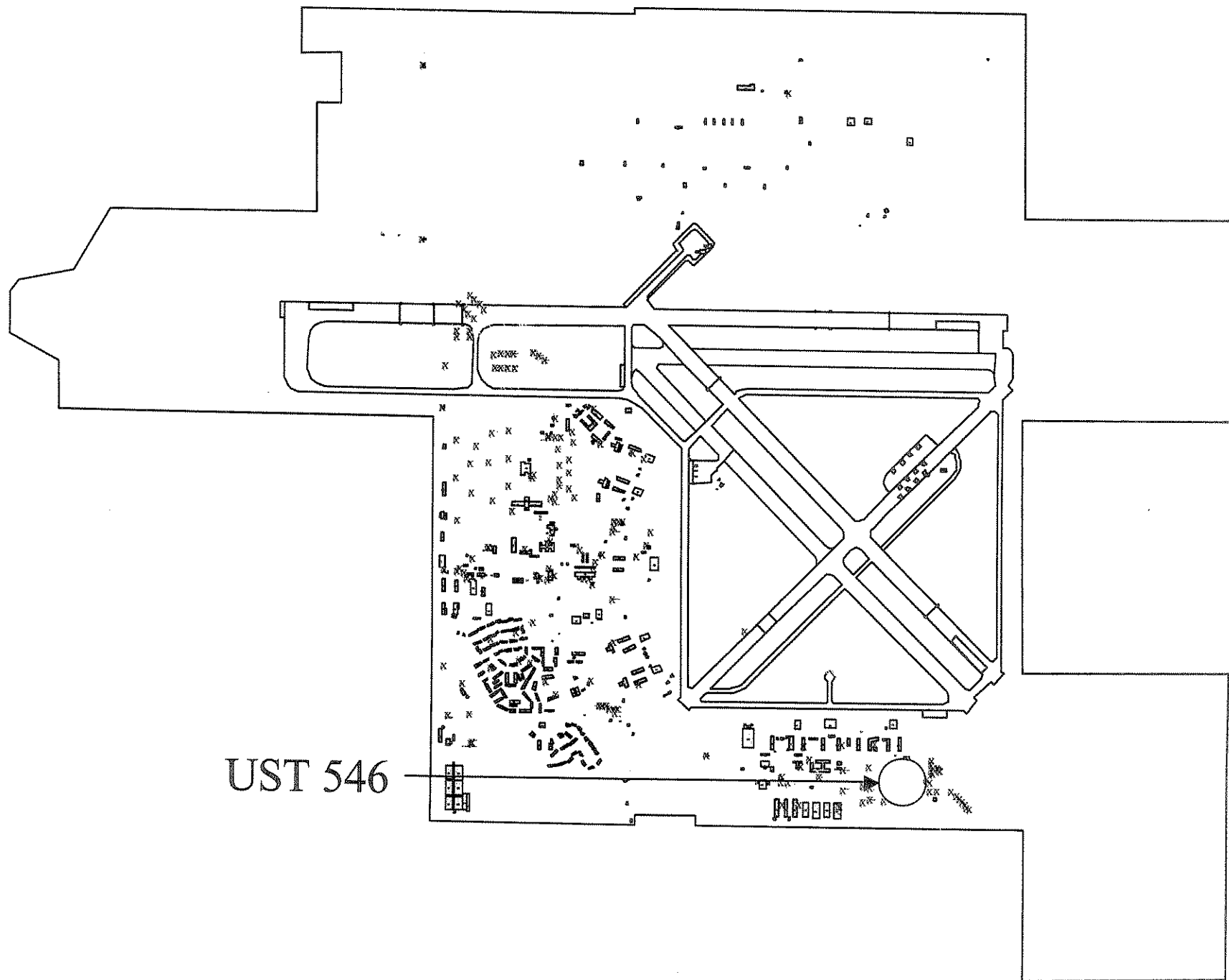


UST 546:

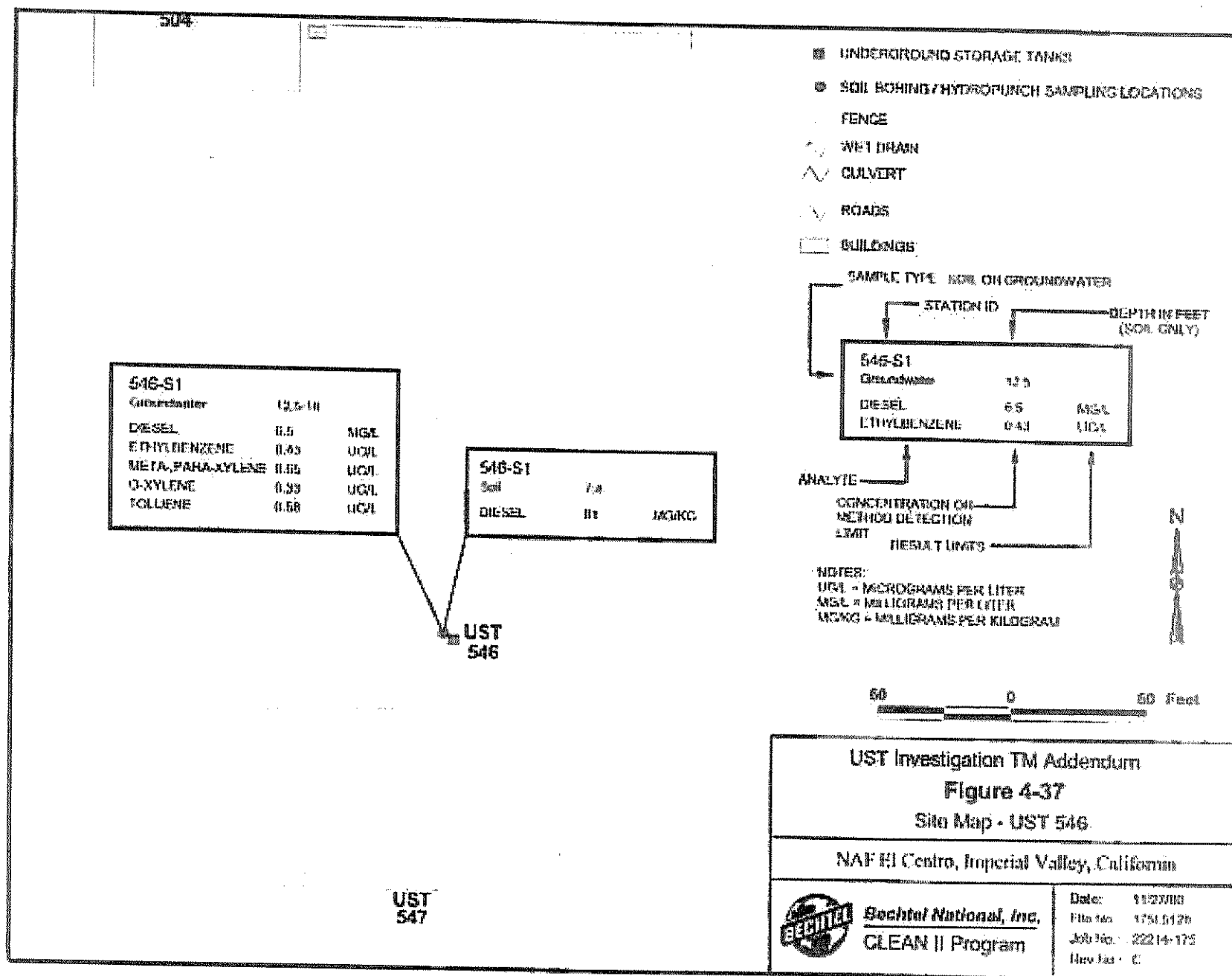
1,400 gallon concrete diesel UST

Removed – unknown. Potholing with a backhoe in June 2003 did not identify any evidence of a former tank at this location

Recommended for Closure – BNI Tech Memo 2



UST 546



Analytical Results for Underground Storage Tank 546

Sample Number	Location	Depth (feet bgs)	TPH as Diesel ^a	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)									
175S103	546-S1	7.4 – 8	91	510 U	760 U	510 U	1,000 U	510 U	1,300 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)									
175HP59	546-S1	12.5 – 16	6.5	0.2 U	0.58	0.43	0.65	0.33	0.5 U
<i>175HP60^b</i>	<i>546-S1</i>	<i>12.5 – 16</i>	<i>6.2</i>	<i>0.2 U</i>	<i>0.58</i>	<i>0.29</i>	<i>0.65</i>	<i>0.3</i>	<i>0.5 U</i>

Notes:

^a TPH as diesel results reported in milligrams per kilogram for soil and milligrams per liter for groundwater (parts per million)

^b italicized results indicate a field duplicate

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

MTBE – methyl-tert-butyl ether

TPH – total petroleum hydrocarbons

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-548 (E)
Site Address: Located in open area south of Seventh Street and west of E Street, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000T22430081

Date spill/leak reported to regulatory agency: 1993 (estimated)
Estimated date discharge/leak was discovered: 1993
How discharge/leak was discovered: Tank removal, 1993
Cause of discharge/leak: Leaking UST
Start date for active remediation: 1993
Completion date for active remediation: 1993

	Easting	Northing
Coordinates for tank:	6742637.50000	1875751.75000

Dates for sample analysis: 1993 and January/February 1999

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

RECEIVED
FEB 06 2004
REGION 7

Monitoring wells installed, properly permitted?	No monitoring wells were installed for the UST investigation
Depth to groundwater:	Approximately 10 feet below ground surface
Is groundwater or surface water impacted?	No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs
Remedial action taken?	Yes. UST and contaminated soil were removed in 1993


Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan?	Yes
Remedial action taken?	Yes. UST and contaminated soil were removed in 1993

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8.5 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature 	Date <u>6/7/05</u>	Signature 	Date <u>5-24-05</u>
---	--------------------	--	---------------------

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

 Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



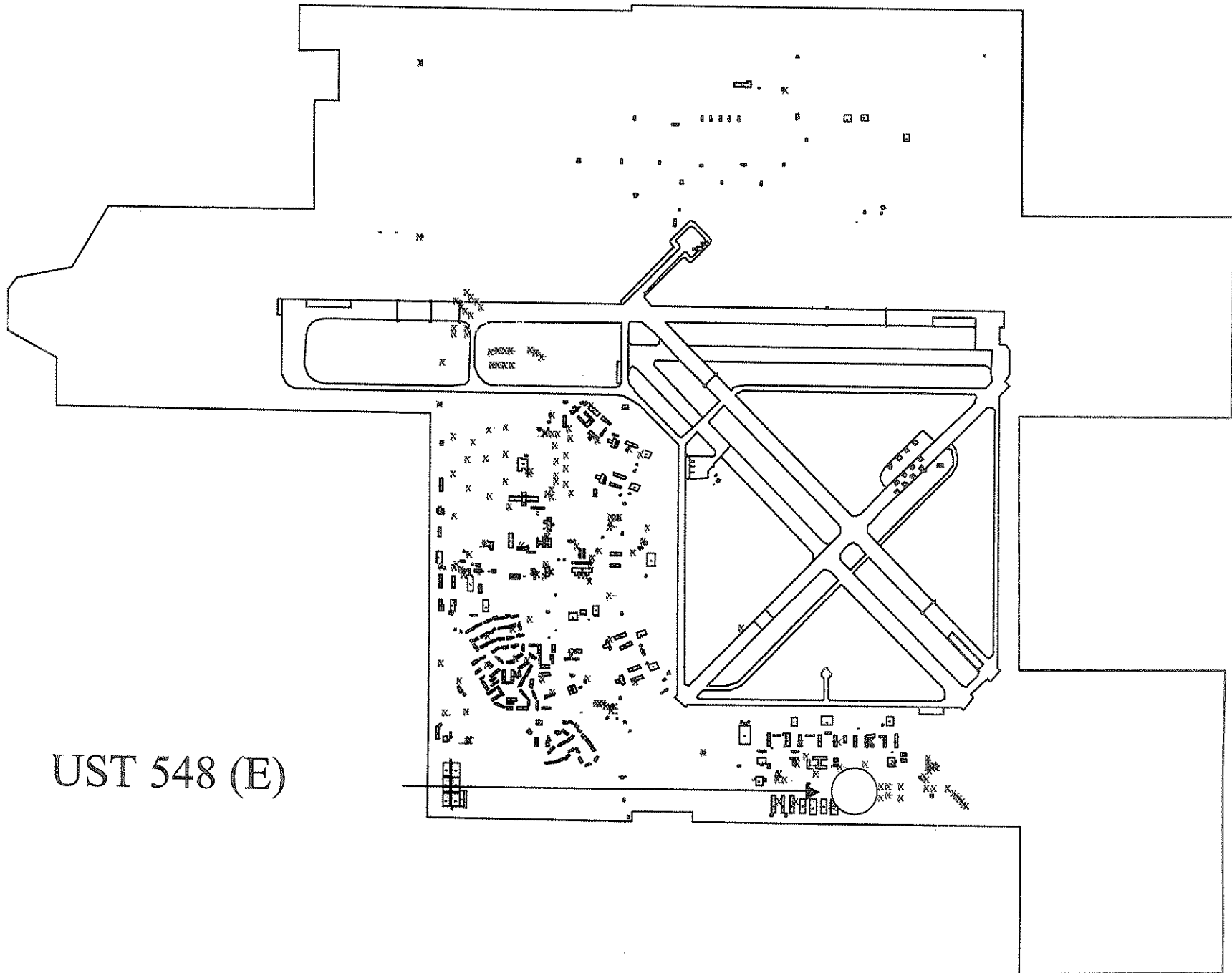
UST 548 (E)

1,400 gallon concrete diesel UST

Removed -1993

Recommended for Closure – BNI Tech Memo 1

UST 548 (E)





Analytical Results for UST 548 (E)

Sample Number	Boring Number	Depth (feet bgs)	TPH-Gas ^a	TPH-Diesel ^b	TRPH	Benzene ^c	Toluene ^c	Ethylbenzene ^c	Total Xylenes ^c	MTBE ^c	Organolead ^d
Soil Results – BNI, Field Investigation, January/February 1999 (mg/kg)											
175S011	548-S1	2.5	NA	13 U	NA	0.066 U	0.13 U	0.13 U	0.13 U	1.3 U	NA
175S012	548-S1	11.5	NA	12 U	NA	0.062 U	0.12 U	0.12 U	0.12 U	1.2 U	NA
175S013	548-S2	6.5	NA	210	NA	0.062 U	0.12 U	0.12 U	0.12 U	1.2 U	NA
175S014	548-S2	10	NA	550	NA	0.067 U	0.13 U	0.32	1.3	1.3 U	NA
Groundwater Results – BNI, Field Investigation, January/February 1999 (µg/L)											
175HP07	548-H1	10 – 14 ^e	NA	3.8 ^f	NA	0.5 U	1.0 U	1.0 U	1.0 U	10 U	NA
175HP08 ^g	548-H1	10 – 14	NA	2.5	NA	0.5 U	1.0 U	1.0 U	1.0 U	10 U	NA
Historical Data, Soil Results – Environmental Chemical Corp., UST Removal Phase 1, 1993 (mg/kg)^h											
E-1		7		14,280							
E-2		7		1,076							
E-3		8.5		537							
E-4		8.5		3,710							
Fuel line SE		Unknown		510							
Fuel line SW		Unknown		85							

Notes:

- ^a analyzed using United States Environmental Protection Agency (U.S. EPA) Method 8015-M; this analysis was calibrated for TPH-gasoline
- ^b analyzed using U.S. EPA Method 8015-M; this analysis was calibrated for TPH-diesel
- ^c analyzed using U.S. EPA Method 8021-B
- ^d analyzed by California Leaking Underground Fuel Tank Method
- ^e HydroPunch screened interval
- ^f diesel results for groundwater reported in milligrams per liter
- ^g field duplicate
- ^h collected during UST removal

Acronyms/Abbreviations:

µg/L – micrograms per liter (parts per billion)
 bgs – below ground surface
 BNI – Bechtel National, Inc.
 mg/kg – milligrams per kilograms (parts per million)
 MTBE – methyl-tert-butyl ether
 NA – not analyzed
 TPH – total petroleum hydrocarbons
 TRPH – total recoverable petroleum hydrocarbons
 U – not detected above the referenced detection limit
 UST – underground storage tank

Source: BNI November 2000, Technical Memorandum 1

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-601
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D005 22430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tank:	6743233.50000	1875861.50000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 567,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1998

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1998

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-602
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tank:	6743426.00000	1875859.37500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 567,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1998

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1998

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

RECEIVED
FEB 06 2004
REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-603
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743494.00000	1875791.00000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 42,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1998

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1998

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez

Date

5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-604
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7DODT 22430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743564.00000	1875722.50000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 42,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1995

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/17/05

Signature

Liann Chavez

Date 5-25-04

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-605
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000122430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743564.00000	1875722.50000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 42,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-29-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-606
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D0DT22430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743599.50000	1875687.62500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 42,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature N.R. Wells Date 6/7/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature Liann Chavez Date 5-29-05

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-607
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 700DT224300025

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743634.00000	1875653.87500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 42,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-608
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7A00T22430005

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743669.00000	1875620.12500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 42,000 gallon steel UST that contained jet fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Site Closure: This UST is identified as being closed in RWQCB Geotracker: Global ID T060251428. Due to successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-609
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000722430005

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743138.00000	1875959.12500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted?

Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater:

Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-25-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-610
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430005

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743167.00000	1876071.25000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted?

Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater:

Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-611
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: N/A

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743166.50000	1876113.25000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted?

Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater:

Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-612
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number:

N/A

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tank:	6743169.00000	1876150.87500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted?

Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater:

Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature



Date

6/7/05

Signature

Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former USTs 5000 1 (A) and 5000-3 (C)
Site Address: 5000-1 (A) was located north of a concrete block building and 5000-3 (C) was located south of lookout tower, both on Bombing Range 5000 approximately 10 miles northwest of Naval Air Facility El Centro

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Military weapons training range

RWQCB File Number: _____

Date spill/leak reported to regulatory agency: No spills/leaks reported
Estimated date discharge/leak was discovered: Not applicable, no discharges/leaks identified
How discharge/leak was discovered: Not applicable, no discharges/leaks identified
Cause of discharge/leak: Not applicable, no discharges/leaks identified
Start date for active remediation: No remediation conducted
Completion date for active remediation: No remediation conducted

	Easting	Northing
Coordinates for tank 5000-1 (A):	6738987.50000	1879309.37500
Coordinates for tank 5000-3 (C):	6738946.50000	1879236.25000

Dates for sample analysis: February 11, 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results tables
Amount of Contaminants Leaked: No evidence of a releases. See attached analytical results tables

MTBE: See attached analytical results tables

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable, no UST and no evidence of soil contamination identified at either location

Estimated volume of contaminated soil left on site and concentration: Not applicable, no evidence of soil contamination identified at either location

Is groundwater contamination completely delineated?	Groundwater not sampled, but no evidence contamination identified at either location
Monitoring wells installed, properly permitted?	No monitoring wells were installed for these UST investigations
Depth to groundwater:	Approximately 30 feet below ground surface.
Is groundwater or surface water impacted?	Groundwater not sampled, but no evidence contamination identified at either location
Remedial action taken?	None. No UST or evidence of soil contamination identified at either location

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? None. No UST or evidence of soil contamination identified at either location

Site Closure: Due to the unconfirmed historical presence of tanks at these locations and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

4/10/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature

Liann P. Chavez Date 5-17-04

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

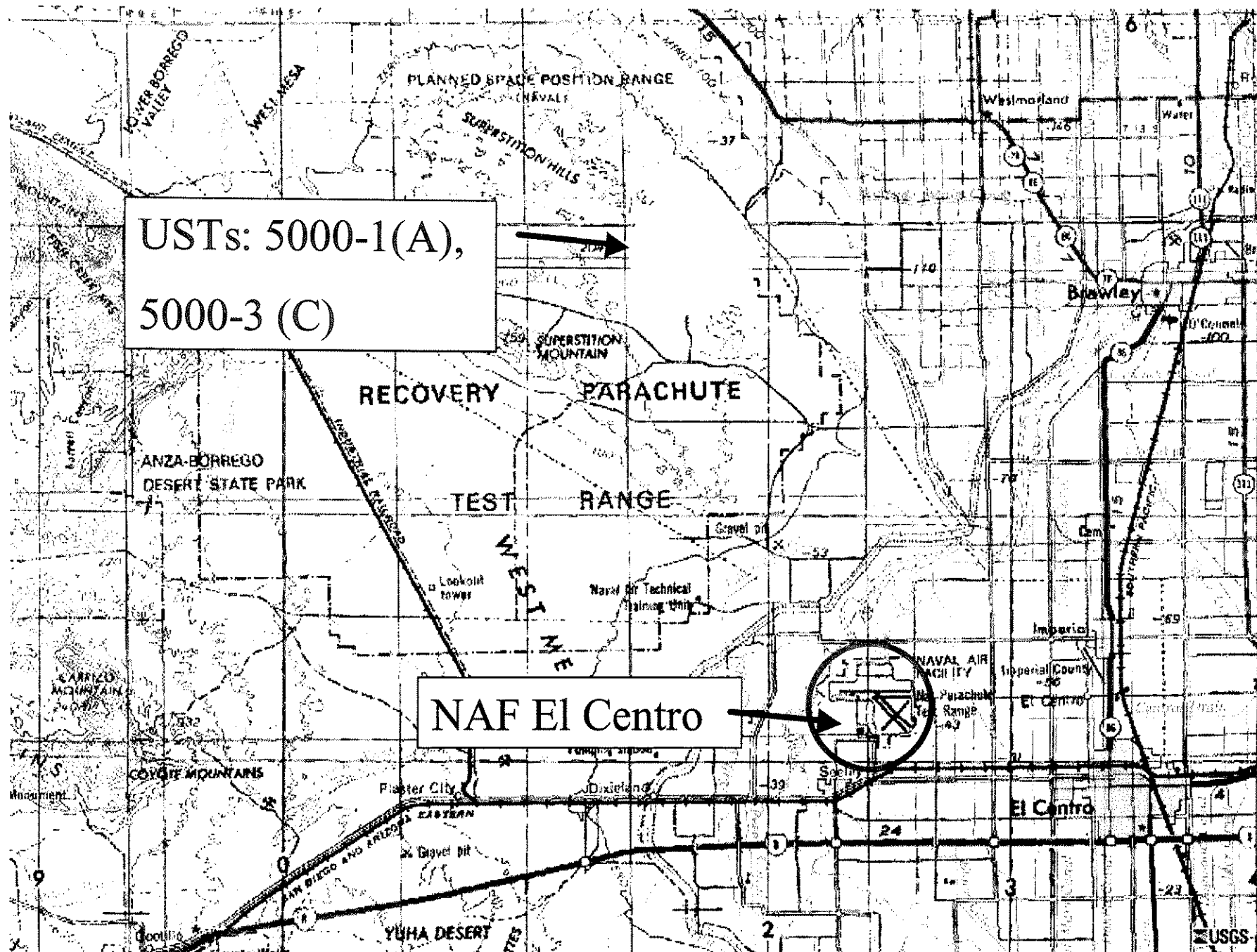


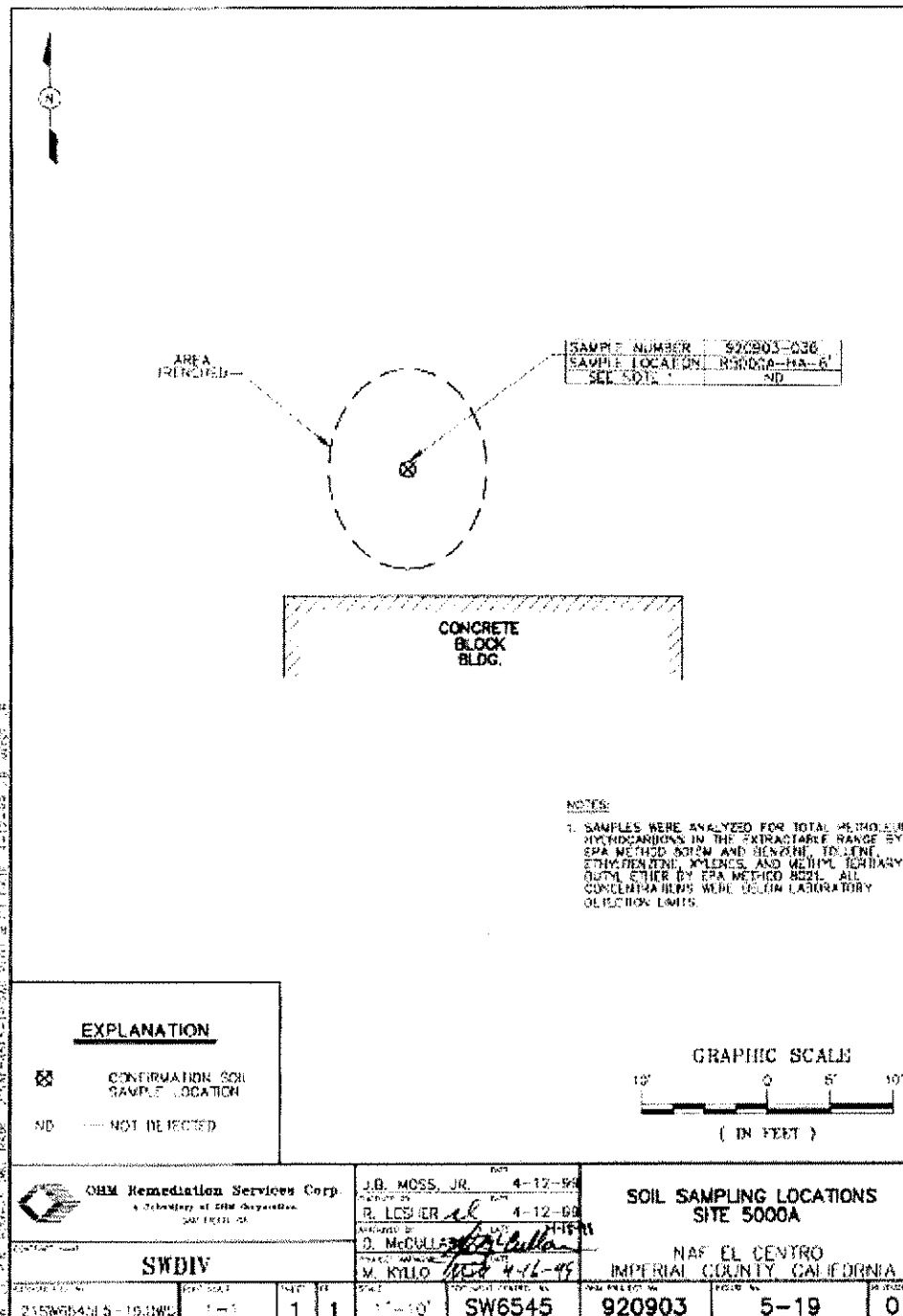
UST 5000-1(A), 5000-3(C)

Unknown construction, unknown contents

Removed -unknown

Recommended for Closure – OHM 1999







FENCE

SAMPLE NUMBER	920903-DJ9
SAMPLE LOCATION	R50X00-1A-4
SEE NOTE 1	NO

PIPE STICKING UP

BURIED PIPE

NOTES:

1. SAMPLES WERE ANALYZED FOR TOTAL PETROLEUM HYDROCARBONS IN THE EXTRACTABLE RANGE BY EPA METHOD 8015M AND BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND METHYL TERTIARY BUTYL ETHER BY EPA METHOD 8021. ALL CONCENTRATIONS WERE BELOW LABORATORY DETECTION LIMITS.

EXPLANATION

- CONFIRMATION SOIL SAMPLE LOCATION
- NO — NOT DETECTED

GRAPHIC SCALE



ORM Remediation Services Corp.
A Subsidiary of ORC Corporation
DAY, TEXAS, TX

J.B. MOSS, JR. 4-12-98
D. LESHER 4-12-98
D. McCULLOUGH 4-12-98
M. KYLLO 4-11-98

**SOIL SAMPLING LOCATIONS
SITE 5000C**

NAF EL CENTRO
IMPERIAL COUNTY, CALIFORNIA

CONTRACT NAME
SWDIV

22SW8545F5-20.DWG	1=1	1	1	1"=10'	SW6545	920903	5-20	0
-------------------	-----	---	---	--------	--------	--------	------	---

RECEIVED
FEB 06 2004
REGION 7

Table 5-14
Confirmation Soil Sample Analytical Results
Site 5000A

Parameter	920903-036 R5000A-HA-6
TPH-d (ppm)	<10
Benzene (ppb)	<5.2
Toluene (ppb)	<5.2
Ethylbenzene (ppb)	<5.2
Xylenes (ppb)	<16
MTBE (ppb)	<26

MTBE – methyl tert-butyl ether

ppb – parts per billion

ppm – parts per million

TPH-d – total petroleum hydrocarbons as diesel fuel

Table 5-15
Confirmation Soil Sample Analytical Results
Site 5000C

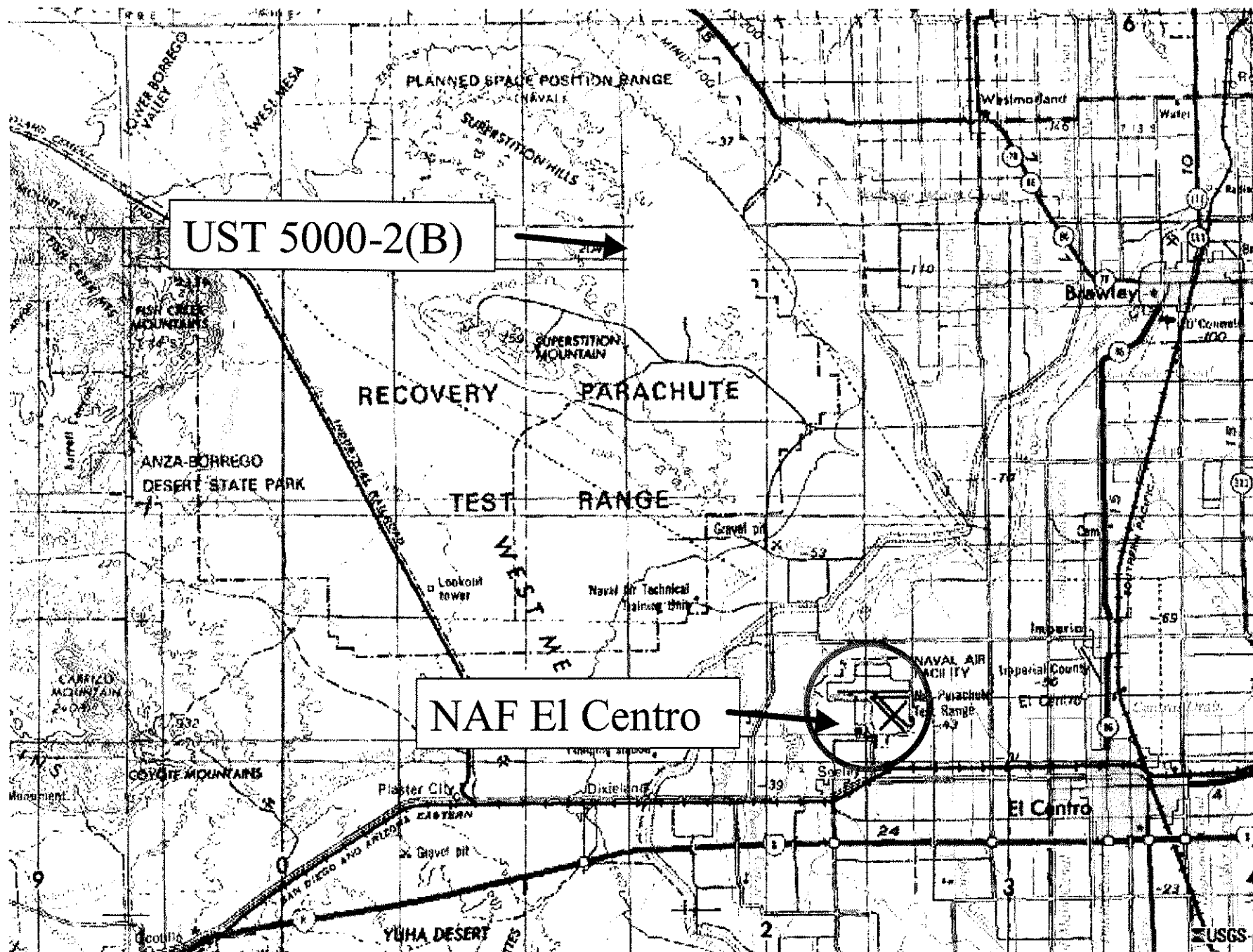
Parameter	920903-039 R5000C-HA-4
TPH-d (ppm)	<10
Benzene (ppb)	<5.2
Toluene (ppb)	<5.2
Ethylbenzene (ppb)	<5.2
Xylenes (ppb)	<15
MTBE (ppb)	<2

MTBE = methyl tert-butyl ether

ppb = parts per billion

ppm = parts per million

TPH-d = total petroleum hydrocarbons as diesel fuel



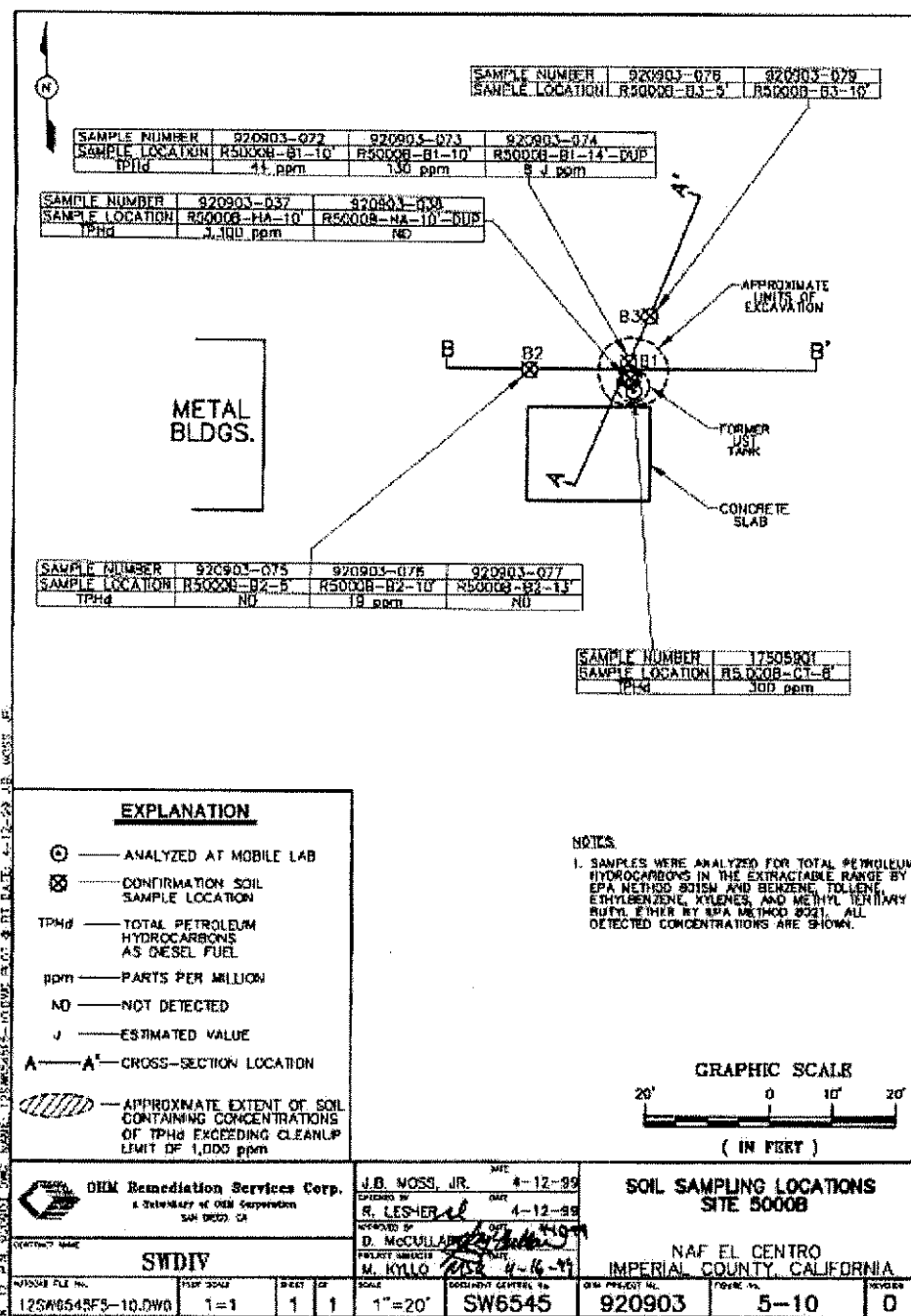


Table 5-6
Soil Sample Analytical Results
Site 5000B

Sample Number	Sample Location	TPH-d (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)
17505901	R5000B-CT-8	300	<50	<100	<100	<1000	<1,000
920903-077	R5000B-HA-10	3,300	<53	<53	<53	<160	<260
920903-078	R5000B-HA-10-DUP	<10	<5.2	<5.2	<5.2	<16	<26
920903-072	R5000B-B1-10	44	<5.4	<5.4	<5.4	<16	<27
920903-073	R5000B-B1-14	130	<5.2	<5.2	<5.2	<16	<26
920903-074	R5000B-B1-14-DUP	81	<5.1	<5.1	<5.1	<15	<26
920903-075	R5000B-B2-5	<10	<5.1	<5.1	<5.1	<15	<26
920903-076	R5000B-B2-10	19	<5.0	<5.0	<5.0	<15	<25
920903-077	R5000B-B2-13	<10	<5.1	<5.1	<5.1	<15	<25
920903-078	R5000B-B3-5	<10	<5.2	<5.2	<5.2	<15	<26
920903-079	R5000B-B3-10	<11	<5.6	<5.6	<5.6	<17	<28

MTBE = methyl tert-butyl ether

ppb = parts per billion

ppm = parts per million

TPH-d = total petroleum hydrocarbons as diesel fuel

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-613
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number:

N/A

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743166.50000	1876198.12500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted?

Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater:

Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature



Date

6/2/05

Signature

Liann Chavez

Date

5-29-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

RECEIVED
FEB 06 2004
REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-614
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: N/A

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743166.00000	1876239.12500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature N. Wells Date 6/7/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature Liann Chavez Date 5-29-05

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-615
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: N/A

Date spill/leak reported to regulatory agency: Not applicable
Estimated date discharge/leak was discovered: Not applicable
How discharge/leak was discovered: Not applicable
Cause of discharge/leak: Not applicable
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743232.00000	1876161.12500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: Fuel island kiosk that was misidentified as a UST
Contaminants Identified: Total petroleum hydrocarbons and BTEX (IR Sites 14 and 15)
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

RECEIVED
FEB 06 2004
REGION 7

Monitoring wells installed, properly permitted?

Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater:

Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted?

No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken?

Yes. IR Sites 14 and were fully remediated

Site Closure: Because IR Sites 14 and 15 were successfully remediated and the location is actually a fuel island kiosk misidentified as a UST, the recommendation to remove this site from the UST Program is accepted and no further action is required.

Signature



Date

6/7/05

Signature

Liann Chavez

Date 5-24-05

N.R. Wells

Lieutenant Commander, CEC, US Navy

By direction of

The Commanding Officer

Liann P. Chavez, R.G.

Senior Engineering Geologist

California Environmental Protection Agency

California Regional Water Quality Control Board

Colorado River Basin Region

RECEIVED
FEB 06 2004
REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-616
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 70002430083

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743102.50000	1876008.75000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 2,000 gallon steel UST that contained diesel fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

RECEIVED
FEB 06 2004
REGION 7

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1993

Site Closure: Due to the removal of this tank and the successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature N.R. Wells Date 6/7/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature Liann Chavez Date 5-25-05

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-617
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 70002430083

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743243.50000	1876127.87500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 10,000 gallon steel UST that contained waste fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

RECEIVED
FEB 06 2004
REGION 7

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1995

Site Closure: Due to the removal of this tank and the successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature

Liann Chavez Date 5-21-05

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-618
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D60122430083

Date spill/leak reported to regulatory agency: 1989 (estimated)
Estimated date discharge/leak was discovered: 1989 (estimated)
How discharge/leak was discovered: Site investigation, 1988
Cause of discharge/leak: Fuel spills, leaking USTs and piping
Start date for active remediation: 1996 (IR Sites 14 and 15 remediation)
Completion date for active remediation: 1997 (IR Sites 14 and 15 remediation)

	Easting	Northing
Coordinates for tanks:	6743269.00000	1876107.87500

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999

Site Characterization Information

Description of the former UST: 10,000 gallon steel UST that contained waste fuel
Contaminants Identified: Total petroleum hydrocarbons and BTEX
Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15. Concentrations specific to this UST location not available.

Estimated volume of contaminated soil left on site and concentration: Not Estimated

RECEIVED
FEB 06 2004
REGION 7

Is groundwater contamination completely delineated? Yes. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. Location of this UST was fully remediated as part of IR Sites 14 and 15. UST was removed in 1995

Site Closure: Due to the removal of this tank and the successful remediation of IR Sites 14 and 15, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez

Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-619
Site Address: Located within the footprint of IR Sites 14 and 15 at southeastern corner of Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7000122430043

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	Not applicable, no discharge/leak identified
Completion date for active remediation:	Not applicable, no discharge/leak identified

	Easting	Northing
Coordinates for tanks:	6743138.50000	1875862.00000

Dates for sample analysis: Multiple sample analyses at IR Sites 14 and 15 between 1988 and 1999, but no samples were collected because no UST was identified during excavation at this site

Site Characterization Information

Description of the former UST: Unknown. No UST was identified during investigation of this site

Contaminants Identified: Total petroleum hydrocarbons and BTEX (as part of IR Sites 14 and 15)

Amount of Contaminants Leaked: Not estimated

MTBE: See attached letter dated October 8, 1999 (IR Sites 14 and 15)

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes, as part of investigation efforts prior to remediation at IR Sites 14 and 15, but not specifically related to this location because no UST was identified during excavation

FEB 06 2004
REGION 7

Estimated volume of contaminated soil left on site and concentration: Not applicable. No UST was identified during excavation at this site

Is groundwater contamination completely delineated? Yes, but associated with IR Sites 14 and 15. Following remediation of IR Sites 14 and 15, analytical results for MTBE and petroleum constituents in groundwater were below detection limits.

Monitoring wells installed, properly permitted? Yes, as part of investigation and remediation effort for IR Sites 14 and 15. Wells destroyed after completion of remedial action.

Depth to groundwater: Approximately 6 to 9 feet below ground surface

Is groundwater or surface water impacted? No. Groundwater contaminants were not reported in downgradient monitoring wells following remediation of IR Sites 14 and 15

Remedial action taken? Yes. This location was fully remediated as part of IR Sites 14 and 15, but no UST was identified during excavation at this site

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. This location was fully remediated as part of IR Sites 14 and 15, but no UST was identified during excavation at this site

Site Closure: Because IR Sites 14 and 15 were successfully remediated and closed and no UST was identified during excavation at this location, the recommendation for UST site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature



Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST 5000-2 (B)
Site Address: Located east of a small building on Bombing Range 5000,
approximately 10 miles northwest of NAF El Centro

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility
El Centro, CA 92243-5001

Current Land Use: Military weapons training range

RWQCB File Number: 7000T22430086

Date spill/leak reported to regulatory agency: February 1999 (estimated)
Estimated date discharge/leak was discovered: February 1999
How discharge/leak was discovered: Field Investigation, February 1999
Cause of discharge/leak: Leaking UST
Start date for active remediation: February 4, 1999
Completion date for active remediation: February 4, 1999

	Easting	Northing
Coordinates for tank:	6738947.00000	1879298.75000

Date for sample analysis: February 4 and 22, 1999

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately of poorly graded sandy silt, silty sand, and gravelly sand

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Approximately 0.5 cubic yard at depths less than 13 feet below ground surface

Is groundwater contamination completely delineated? Groundwater was not sampled, but soil contamination does not extend beyond about 13 feet below ground surface and depth to groundwater is greater than 30 feet below ground surface

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Greater than 30 feet below ground surface

Is groundwater or surface water impacted? Groundwater was not sampled, but depth to groundwater is at least 17 feet greater than maximum depth of soil contamination

Remedial action taken? UST and contaminated soil were removed in February 1999

Closure

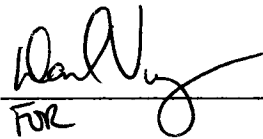
Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? UST and contaminated soil were removed in February 1999

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 8 feet of fill material) and the contaminants do not pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature _____ Date _____

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature  Date 8/15/05
FOR
Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



UST 5000-2 (B)

1,000 gallon concrete diesel UST

Removed -1999

Recommended for Closure – OHM 1999



SAMPLE NUMBER	920903-076	920903-079
SAMPLE LOCATION	R5000B-B3-5	R5000B-B3-10

SAMPLE NUMBER	920903-072	920903-073	920903-074
SAMPLE LOCATION	R5000B-B1-10'	R5000B-B1-10'	R5000B-B1-14'-DUP
TPHd	44 ppm	130 ppm	8 J ppm

SAMPLE NUMBER	920903-037	920903-038
SAMPLE LOCATION	R5000B-HA-10'	R5000B-HA-10'-DUP
TPHd	3,300 ppm	ND

SAMPLE NUMBER	920903-075	920903-076	920903-077
SAMPLE LOCATION	R5000B-B2-5'	R5000B-B2-10'	R5000B-B2-13'
TPHd	ND	19 ppm	ND

SAMPLE NUMBER	1750901
SAMPLE LOCATION	R5000B-CT-8'
TPHd	300 ppm

METAL
BLDGS.

APPROXIMATE
LIMITS OF
EXCAVATION

FORMER
UST
TANK

CONCRETE
SLAB

EXPLANATION

⊙ — ANALYZED AT MOBILE LAB

⊗ — CONFIRMATION SOIL
SAMPLE LOCATION

TPHd — TOTAL PETROLEUM
HYDROCARBONS
AS DIESEL FUEL

ppm — PARTS PER MILLION

ND — NOT DETECTED

J — ESTIMATED VALUE

A—A' — CROSS-SECTION LOCATION



— APPROXIMATE EXTENT OF SOIL
CONTAINING CONCENTRATIONS
OF TPHd EXCEEDING CLEANUP
LIMIT OF 1,000 ppm

NOTE

1. SAMPLES WERE ANALYZED FOR TOTAL PETROLEUM
HYDROCARBONS (TPHd) ONLY. ANALYSIS WAS BY
GASTROCHEMICAL ANALYSIS. TO THE
EXTENT OF THE ANALYSIS, NO OTHER
CONTAMINANTS WERE DETECTED. ALL
DETECTED CONCENTRATIONS ARE SHOWN.

GRAPHIC SCALE



(IN FEET)



ODM Remediation Services Corp.
A DIVISION OF ODM Corporation
201 50th St
San Diego, CA

J. B. JONES, JR. 4-12-80
R. LEWIS 4-12-80
B. McCULLOUGH 4-12-80
M. KILLO 4-12-80

SOIL SAMPLING LOCATIONS SITE 8000B

NAF EL CENTRO
IMPERIAL COUNTY, CALIFORNIA

SWDIV

PROJECT NO.	12SN0545F5-10.0WB	SP-0000	1=1	1	1	1"=20'	SN0545	920903	8-10	0
-------------	-------------------	---------	-----	---	---	--------	--------	--------	------	---

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST-Pipeline North
Site Address: Located east of A Street and to the southwest of Building 125, Naval Air Facility El Centro.
Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Active military base

RWQCB File Number: 7D00T22430084

Date spill/leak reported to regulatory agency: 1995 (estimated)
Estimated date discharge/leak was discovered: 1995
How discharge/leak was discovered: Tank removal, 1995
Cause of discharge/leak: Leaking UST
Start date for active remediation: During tank removal in 1995
Completion date for active remediation: During tank removal in 1995

	Easting	Northing
Coordinates for tank:	6738913.00000	1879180.12500

Dates for sample analysis: 1995 and January 2000

Site Characterization Information

Description of the former UST: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated

Estimated volume of contaminated soil left on site and concentration: Not Estimated

Is groundwater contamination completely delineated? Analytical results for groundwater are below tap water PRGs and drinking water MCLs.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 13.5 feet below ground surface

Is groundwater or surface water impacted? No. Analytical results for groundwater are below tap water PRGs and drinking water MCLs

Remedial action taken? Yes. UST and contaminated soil removed in 1995

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? Yes. UST and contaminated soil removed in 1995

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 10 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature



Date

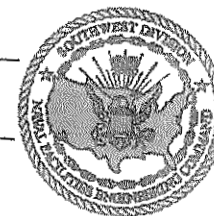
5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



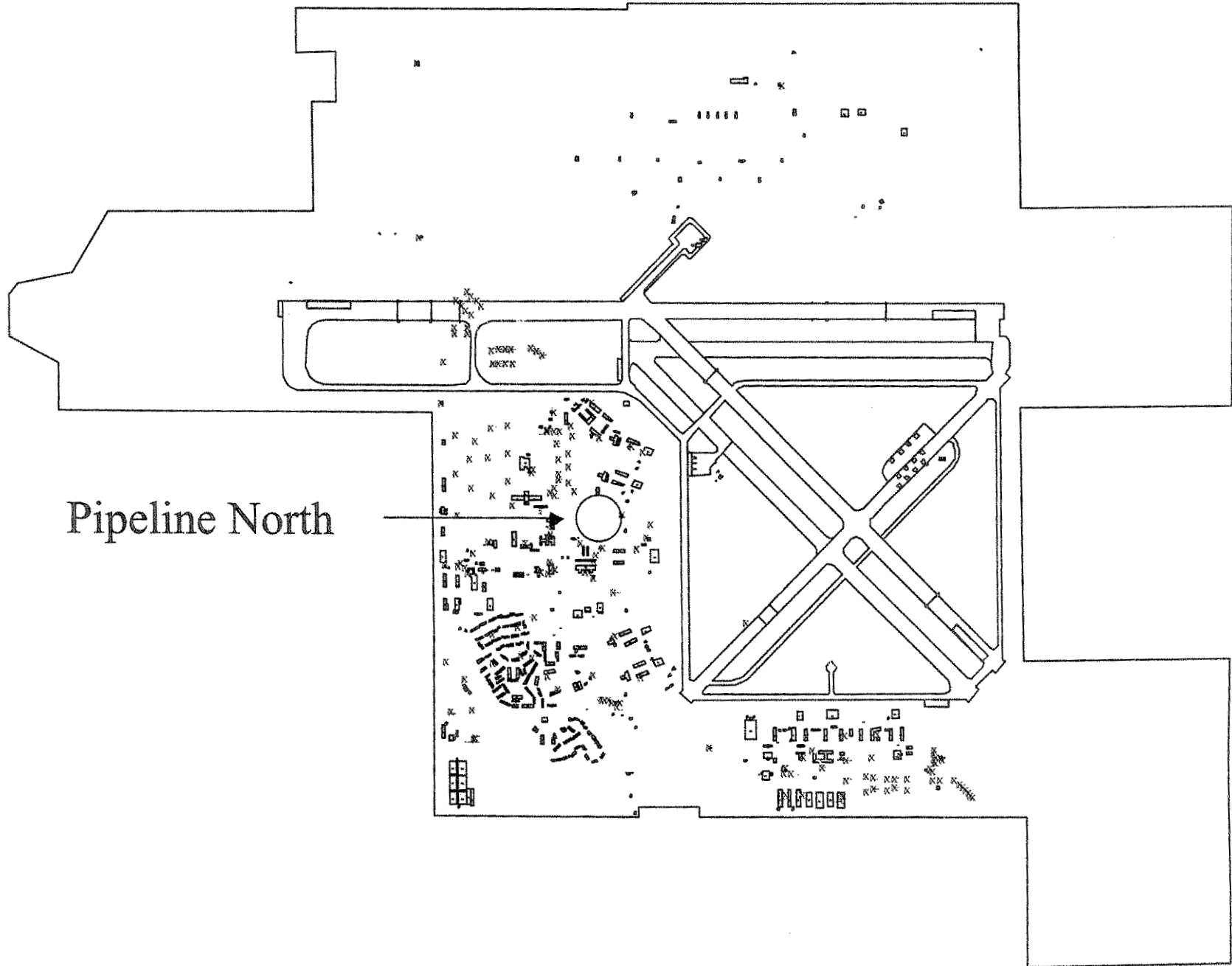
Pipeline North

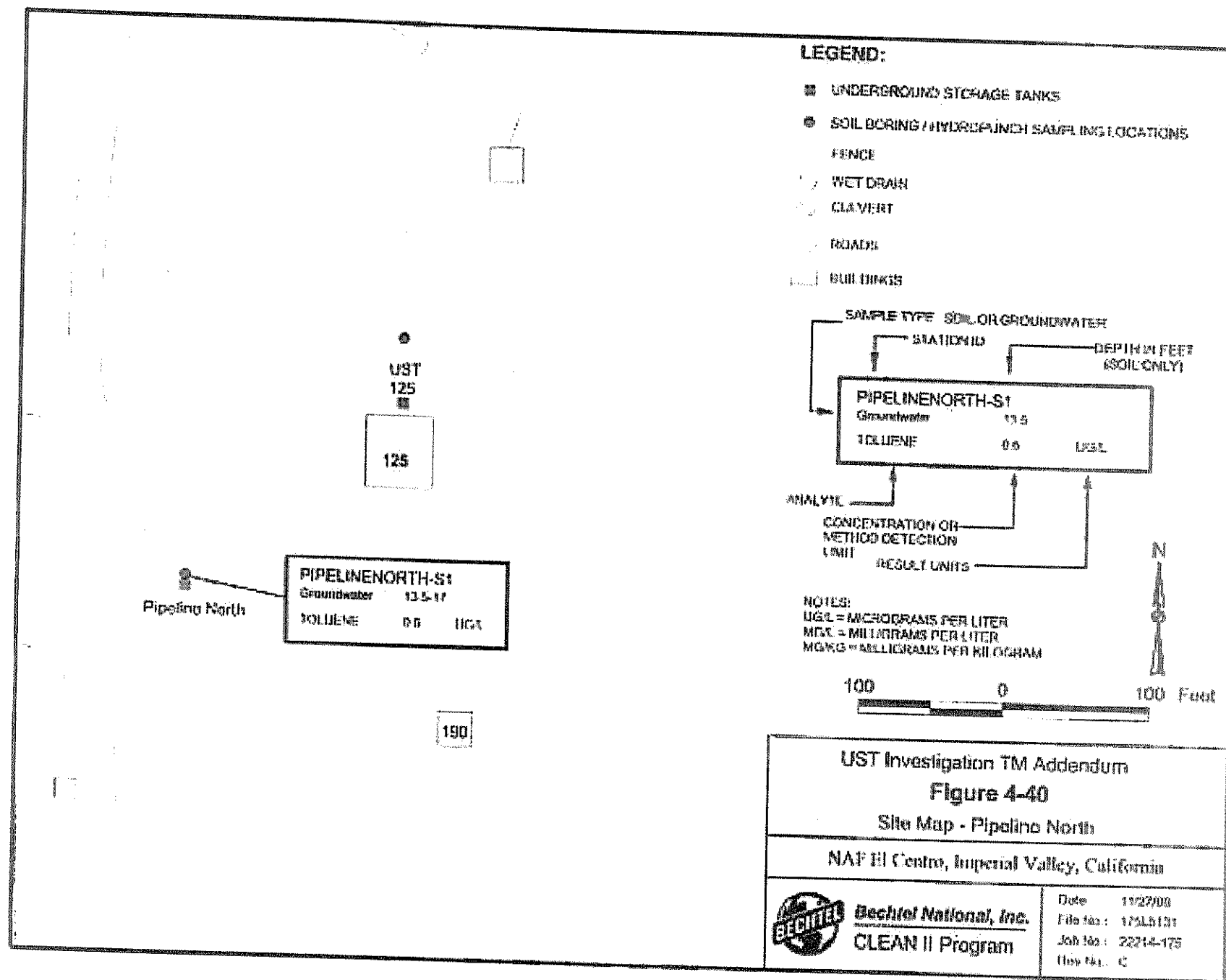
10,000 gallon steel jet fuel pipeline

Removed -1995

Recommended for Closure – BNI Tech Memo 2

Pipeline North





Analytical Results for Underground Storage Tank Pipeline North

Sample Number	Location	Depth (feet bgs)	TPH as Diesel ^a	TPH as Jet Fuel ^a	TPH as Gasoline ^a	TRPH ^a	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	Total Xylenes	MTEB
Soil Results – BNI Field Investigation, January 2000 (µg/kg)													
175S120	PIPELINENORTH-S1	8.8–9.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	120 U
Groundwater Results – BNI Field Investigation, January 2000 (µg/L)													
175HP78	PIPELINENORTH-S1	13.5–17	NA	NA	NA	NA	0.2 U	0.58	0.2 U	0.4 U	0.2 U	NA	0.5 U
175HP79 ^b	PIPELINENORTH-S1	13.5–17	NA	NA	NA	NA	0.2 U	0.6	0.2 U	0.4 U	0.2 U	NA	0.5 U
Historical Data, Soil Results – Navy Public Works Center, UST Removal, 1995 (µg/kg)													
13+45/125-4	UST - North	10	10 U	10 U	5.9	12	6.1	16	26			110	
13+65/125-3	UST - North	10	10 U	10 U	2.5	7.2	5.0 U	5.0 U	7.3			15	
13+70/125-2	UST - North	10	10 U	68	29	27	25	71	70			450	
13+75/125-1	UST - North	10	10 U	10 U	5	6.8	5.0 U	15	41			77	
66+36/NT-1	UST - North	12	10 U	10 U	1.0 U		5.0 U	5.0 U	5.0 U			10 U	
66+36/NT-2	UST - North	12	10 U	10 U	1.0 U		5.0 U	5.0 U	5.0 U			10 U	
Historical Data, Groundwater Results – Navy Public Works Center, UST Removal, 1995 (mg/L)													
T-2	North tank	Unknown	5.4	2 U									

Notes:

^a TPH and TRPH results in milligrams per kilogram for soil and milligrams per liter for water (parts per million); TRPH analyzed using U.S. EPA Method 418.1

^b italicized results indicate a field duplicate

Acronyms/Abbreviations:

bgs – below ground surface

BNI – Bechtel National, Inc.

µg/kg – micrograms per kilogram

µg/L – micrograms per liter

mg/L – milligrams per liter

MTEB – methyl-tert-butyl ether

NA – not analyzed

TPH – total petroleum hydrocarbons

TRPH – total recoverable petroleum hydrocarbons

U.S. EPA – United States Environmental Protection Agency

UST – underground storage tank

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST R-27 (B)
Site Address: Aerial gunnery range No. R-27 (formerly the Recovery Parachute Test Range), on West Mesa approximately 4 miles northwest of Naval Air Facility El Centro

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Military aerial gunnery range

RWQCB File Number: N/A NO RELEASE AT THIS SITE

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	Tank removed in 1993
Completion date for active remediation:	Tank removed in 1993

	Easting	Northing
Coordinates for tanks:	6688389.32000	1911272.87000

Dates for sample analysis: 1994 and January 2000

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: No evidence of a leak. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable. Based on a review of the analytical data, no soil contamination was identified at this location.

Estimated volume of contaminated soil left on site and concentration: None

RECEIVED

FEB 28 2004

REGION

Is groundwater contamination completely delineated? Not applicable. No groundwater sampling conducted since no evidence of a release was identified during tank removal.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 120 feet below ground surface.

Is groundwater or surface water impacted? No. No evidence of a release identified during tank removal

Remedial action taken? UST removed in 1993

Closure

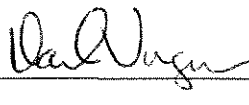
Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes


Remedial action taken? UST removed in 1993

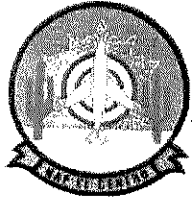
Site Closure: No contaminants were reported in soil at concentrations that pose an unacceptable risk to human health or the environment. Therefore, the recommendation for site closure is accepted and no further action is required at this site.

Signature  Date 6/7/05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Signature  Date 6/23/05

 Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

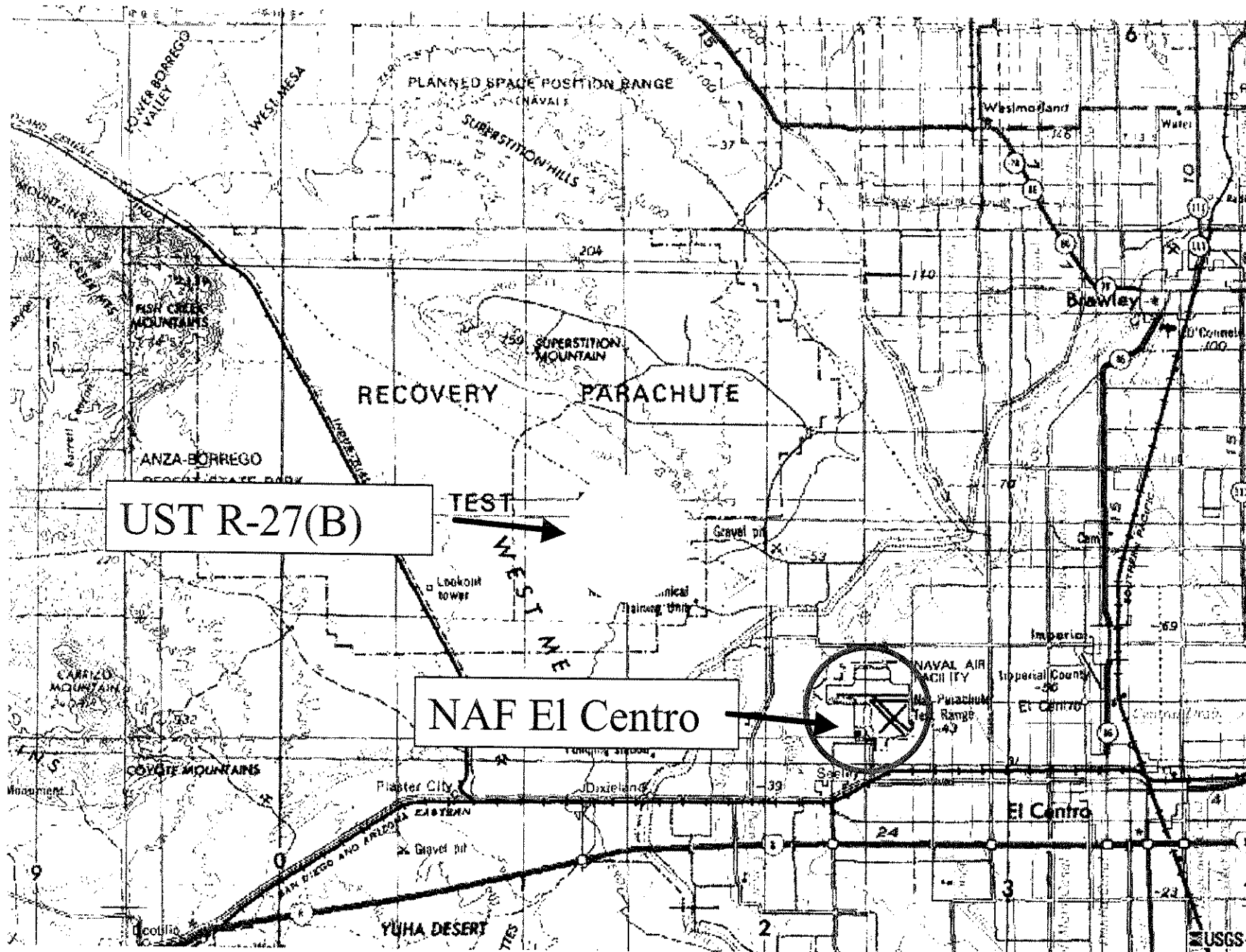


UST R-27 (B)

1,400 gallon concrete diesel UST

Removed -1993

Recommended for Closure – BNI Tech Memo 2



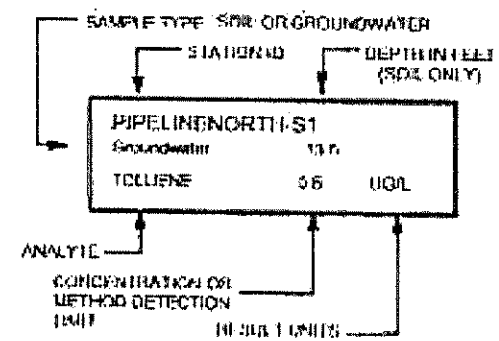
R27B-S1
NO ANALYTES DETECTED
AT THIS LOCATION

R27B-S1

CONCRETE
PAD

LEGEND:

- UNDERGROUND STORAGE TANKS
- SOIL BORING / HYDROPUNCH SAMPLING LOCATIONS
- CONCRETE PAD



NOTES
UGL = MICROGRAMS PER LITER
MMD = MILLIGRAMS PER LITER OR GRAM



UST Investigation TM Addendum

Figure 4-41

Site Map - UST R27B

NAF El Centro, Imperial Valley, California



Bechtel National, Inc.
CLEAN II Program

Date: 11/27/00
File No: 175L0070
Job No: 22214-175
Rev No: 0

Analytical Results for Underground Storage Tank R-27(B)

Sample Number	Location	Depth (feet bgs)	TRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
Soil Results – BNI Field Investigation, January 2000 (µg/kg)								
175S127	R27B-S1	7.5 – 8	NA	NA	NA	NA	NA	520 U
175S128	R27B-S1	15.5 – 16	NA	NA	NA	NA	NA	100 U
Historical Data, Soil Results – Kroeker, Inc., UST Removal, 1994 (mg/kg)								
B-27-S1		3	35	0.005 U	0.005 U	0.005 U	0.01 U	
B-27-S2		3	20 U	0.005 U	0.005 U	0.005 U	0.01 U	
B-27-S3		3	20 U	0.005 U	0.005 U	0.005 U	0.01 U	
B-27-S4		8	20 U	0.005 U	0.005 U	0.005 U	0.01 U	

Acronyms/Abbreviations:

bgs – below ground surface
 BNI – Bechtel National, Inc.
 µg/kg – micrograms per kilogram
 mg/kg – milligrams per kilogram
 MTBE – methyl-tert-butyl ether
 NA – not analyzed
 TRPH – total recoverable petroleum hydrocarbons
 UST – underground storage tank

Data Qualifier:

U – not detected

Source: BNI November 2000, Technical Memorandum 2

RECEIVED
 FEB 06 2004
 REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name UST R-2512 (A)
Site Address Target 68 in bombing range Area R-2512 on East Mesa, approximately 2 miles south of Highway 78 and 27 miles northeast of NAF El Centro

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Military weapons training range

RWQCB File Number: N/A NO SPILL/LEAK AT THIS SITE

Date spill/leak reported to regulatory agency:	No spill/leak reported
Estimated date discharge/leak was discovered:	Not applicable, no discharge/leak identified
How discharge/leak was discovered:	Not applicable, no discharge/leak identified
Cause of discharge/leak:	Not applicable, no discharge/leak identified
Start date for active remediation:	No remediation conducted
Completion date for active remediation:	No remediation conducted

	Easting	Northing
Coordinates for tank:	6881030.62755	1890748.24961

Dates for sample analysis: February 2, 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: No evidence of leakage. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately fine grained lithology with laterally discontinuous lenses of interbedded fine sands, silts, and clays.

Is soil contamination completely delineated (to what levels)? Not applicable, no evidence of a tank or soil contamination identified at this location

Estimated volume of contaminated soil left on site and concentration: Not applicable, no evidence of a tank or soil contamination identified at this location

Is groundwater contamination completely delineated? Not applicable. No evidence of a tank or leakage that would cause contamination.

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 125 feet below ground surface

Is groundwater or surface water impacted? No

Remedial action taken? None required, no evidence of a tank or contamination identified at this location

Closure

Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Not applicable, no corrective action was required since there was no evidence of a tank or contamination

Remedial action taken? None required, no evidence of a tank or contamination was identified at this location

Site Closure: Investigation of this site found no evidence of a UST or a release and no contaminants were reported in soil at concentrations that pose an unacceptable risk to human health or the environment. Therefore, the recommendation for site closure is accepted and no further action is required at this site.

Signature



Date

6/7/05

Signature

Liann Chavez

Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO



UST R-2512 (A)

Unknown volume concrete diesel UST

Removed -unknown

Recommended for Closure – OHM 1999

UST R-2512 (A)

NAF E1 Centro

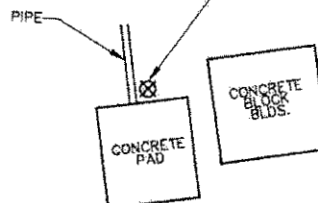
DECEMBER

1
2
3
4
5
6
7
8

U.S.C.



SAMPLE NUMBER	920903-027
SAMPLE LOCATION	R68-HA-4'
TPHd	7 J ppm
E	0.6 J ppb



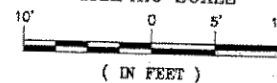
NOTES:

1. SAMPLES WERE ANALYZED FOR TOTAL PETROLEUM HYDROCARBONS IN THE EXTRACTABLE RANGE BY EPA METHOD 8015M AND BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND METHYL TERTIARY BUTYL ETHER BY EPA METHOD 8021. ALL DETECTED CONCENTRATIONS ARE SHOWN.

EXPLANATION

- ☒ — CONFIRMATION SOIL SAMPLE LOCATION
- TPHd — TOTAL PETROLEUM HYDROCARBONS AS DIESEL FUEL
- E — ETHYLBENZENE
- J — ESTIMATED VALUE
- ppm — PARTS PER MILLION
- ppb — PARTS PER BILLION

GRAPHIC SCALE



(IN FEET)



OHM Remediation Services Corp.
A Subsidiary of OHM Corporation
SAN DIEGO, CA

SWDIV

J.B. MOSS, JR. DATE 4-12-99
CHECKED BY R. LESHER DATE 4-12-99
APPROVED BY D. McCULLAH DATE 4-12-99
PROJECT MANAGER M. KYLO DATE 4-16-99

SOIL SAMPLING LOCATIONS
SITE R-2512A
(RANGE 68)

NAF EL CENTRO
IMPERIAL COUNTY, CALIFORNIA

20SW6545F5-18.DWG

1=1

1 OF 1

1"=10'

SW6545

920903

5-18

0

N. 20 P.N. 920903.DWG NAME: 20SW6545F5-18.DWG PLOT # 18 DATE: 4-12-99 J.B. MOSS, JR.

Table 5-13
Confirmation Soil Sample Analytical Results
Site R-2512A (Range 68)

Parameter	920903-027 R68-HA-4
TPH-d (ppm)	7 J
Benzene (ppb)	<5.1
Toluene (ppb)	<5.1
Ethylbenzene (ppb)	0.6 J
Xylenes (ppb)	<15
MTBE (ppb)	<26

MTBE – methyl tert-butyl ether

ppb – parts per billion

ppm – parts per million

TPH-d – total petroleum hydrocarbons as diesel fuel

SWDIV Contract No. N68711-93-D-1459, DO 0129
 OHM Project No. 920903, DCN SW6545

Closure Report for Various UST Sites
 Revision 0, April 22, 1999

RECEIVED

FEB 06 2004
 REGION 7

TANK CLOSURE SUMMARY

Site Information

Site Name: Former UST R-2512 (B)
Site Address: Target 95 in bombing range Area R-2512 on East Mesa, approximately 4 miles north of Highway 78 and 25 miles northeast of NAF El Centro

Responsible Party Name: Robert Fischer, Environmental Protection Specialist
Responsible Party Phone: (760) 339-2284
Responsible Party Address: 1605 Third Street, Building 504, Code 45RF, Naval Air Facility El Centro, CA 92243-5001

Current Land Use: Military weapons training range

RWQCB File Number: 7DOPT22430085

Date spill/leak reported to regulatory agency: February 2, 1999 (estimated)
Estimated date discharge/leak was discovered: February 2, 1999 (estimated)
How discharge/leak was discovered: Field Investigation, February 1999
Cause of discharge/leak: Leaking UST
Start date for active remediation: February 2, 1999
Completion date for active remediation: February 2, 1999

	Easting	Northing
Coordinates for tanks:	6866106.11253	1939525.93285

Dates for sample analysis: February 2 and 22, 1999

Site Characterization Information

Description of the former USTs: See attached description page
Contaminants Identified: See attached analytical results table
Amount of Contaminants Leaked: Not estimated. See attached analytical results table

MTBE: See attached analytical results table

Description of the soil/geology: Subsurface geology consists of predominately of poorly graded sand and gravelly sand

Is soil contamination completely delineated (to what levels)? Yes. Based on a review of the analytical data, the lateral and vertical extent of soil impacted with fuels has been delineated.

Estimated volume of contaminated soil left on site and concentration: Approximately 35 yd³ (6 to 10 feet bgs) with TPH concentrations up to 1,800 ppm

Is groundwater contamination completely delineated? Not applicable. Soil contamination does not extend below 10 feet bgs and depth to groundwater is greater than 100 feet bgs

RECEIVED
FEB 06 2004
REGION 1

Monitoring wells installed, properly permitted? No monitoring wells were installed for the UST investigation

Depth to groundwater: Approximately 110 feet below ground surface.

Is groundwater or surface water impacted? No


Remedial action taken? UST removed February 2, 1999

Closure


Does complete corrective action protect beneficial uses per the RWQCB Basin Plan? Yes

Remedial action taken? UST removed February 2, 1999

Site Closure: Due to limited exposure pathways (i.e the site is covered with approximately 6 feet of fill material) and the absence of contaminants reported at concentrations that pose an unacceptable risk to human health or the environment, the recommendation for site closure is accepted and no further action is required at this site.

Signature  Date 6/7/05 Signature Liann Chavez Date 5-24-05

N.R. Wells
Lieutenant Commander, CEC, US Navy
By direction of
The Commanding Officer

 Liann P. Chavez, R.G.
Senior Engineering Geologist
California Environmental Protection Agency
California Regional Water Quality Control Board
Colorado River Basin Region



NAVAL AIR FACILITY EL CENTRO

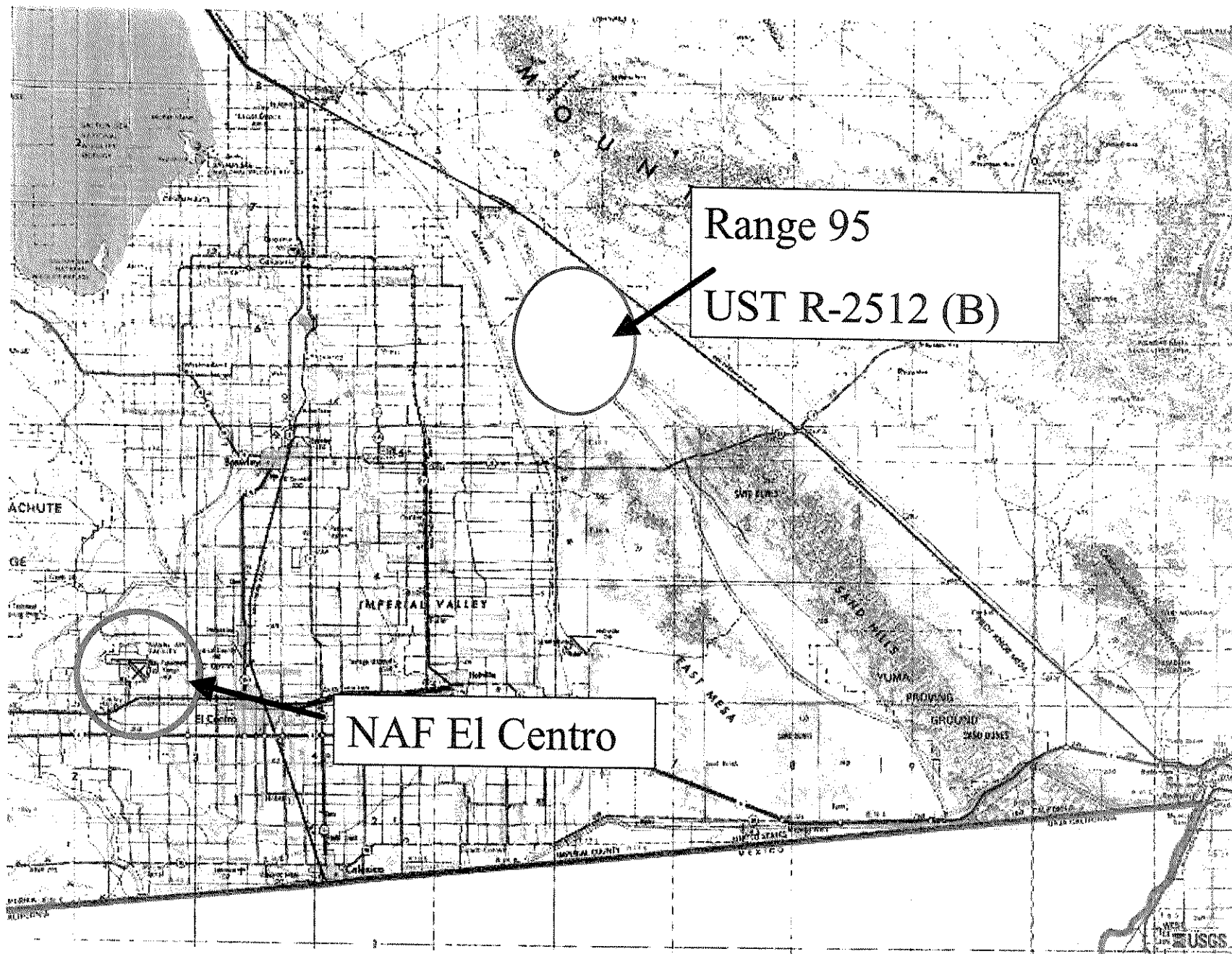


UST R-2512 (B)

200 gallon steel diesel UST

Removed -1999

Recommended for Closure – OHM 1999



RECEIVED
FEB 06 2004
REGION 7

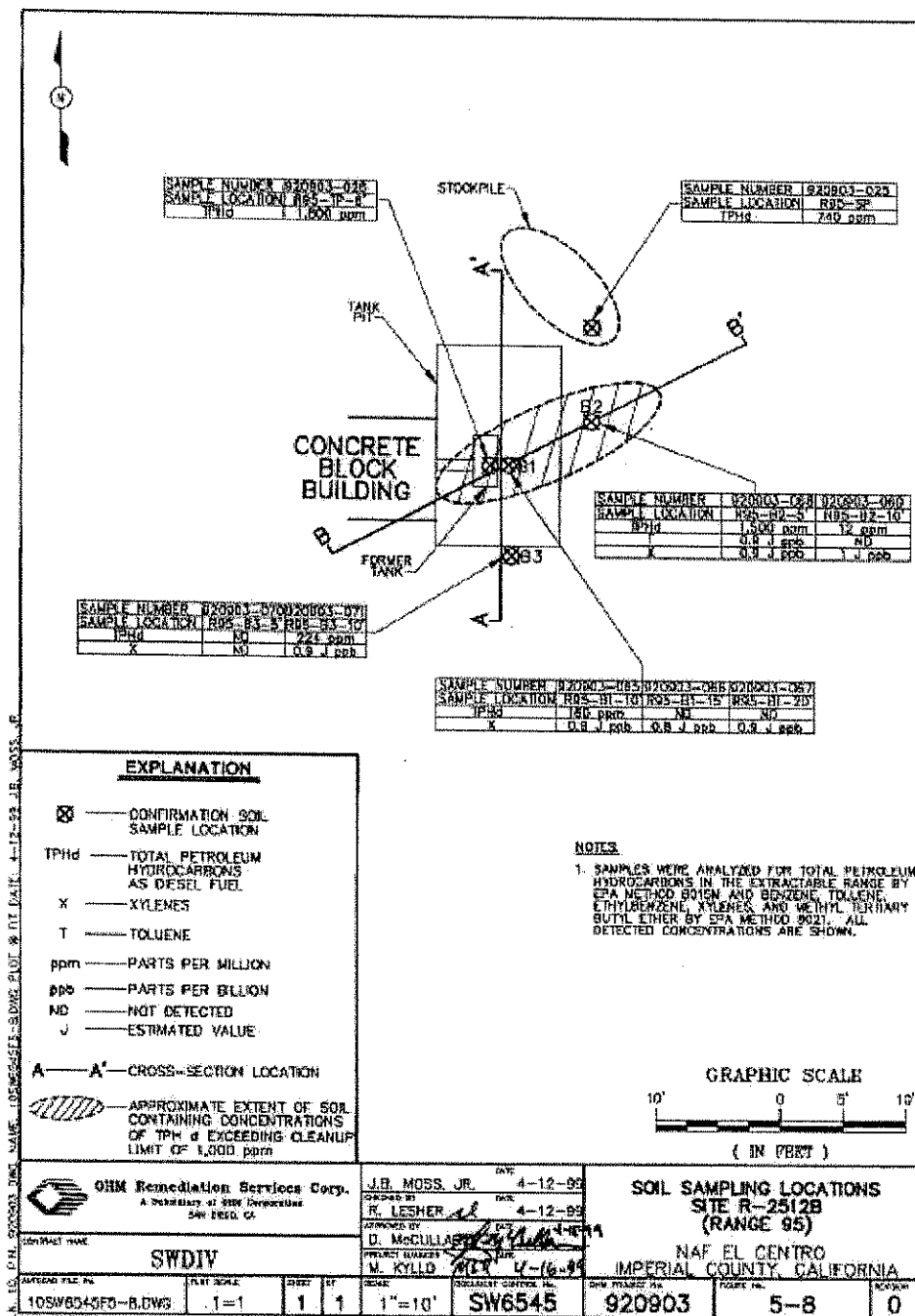


Table 5-5
Soil Sample Analytical Results
Site R-2512B (Bombing Range 95)

Sample Number	Sample Location	TPH-d (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)
920903-026	R95-TP-6	1,800	<6.2	<6.2	<6.2	<19	<13
920903-025	R95-SP	740	<5.2	<5.2	<5.2	<15	<26
920903-065	R95-B1-10	160	<5.3	<5.3	<5.3	0.9 J	<26
920903-066	R95-B1-15	<11	<5.3	<5.3	<5.3	0.8 J	<28
920903-067	R95-B1-20	<10	<5.1	<5.1	<5.1	0.9 J	<26
920903-068	R95-B2-5	1,500	<5.0	0.9 J	<5.0	0.9 J	<25
920903-069	R95-B2-10	12	<5.2	<5.2	<5.2	1 J	<26
920903-070	R95-B3-5	<11	<5.4	<5.4	<5.4	<16	<27
920903-071	R95-B3-10	224	<5.2	<5.2	<5.2	0.9 J	<26

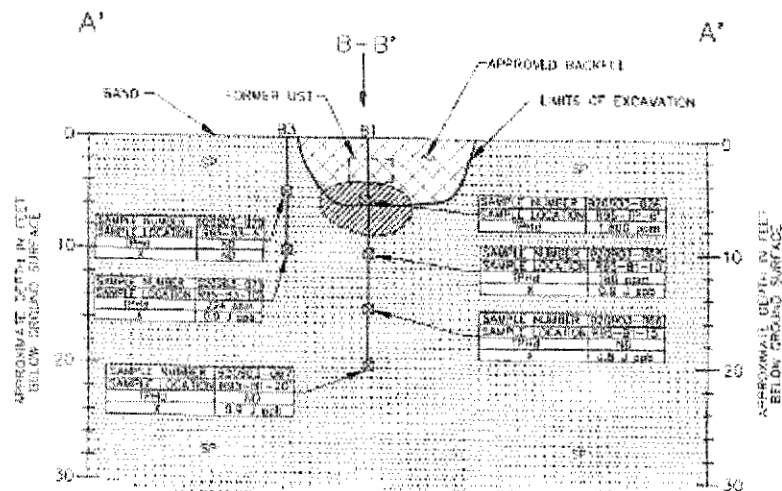
MTBE - methyl tert-butyl ether

ppb - parts per billion

ppm - parts per million

TPH-d - total petroleum hydrocarbons as diesel fuel

RECEIVED
FEB 06 2004
REGION 7



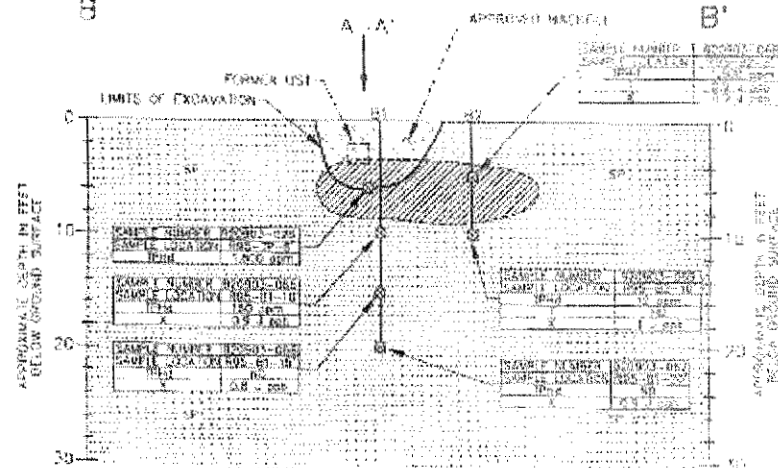
SECTION A-A'

SOUTHWEST

B

NORTHEAST

B'

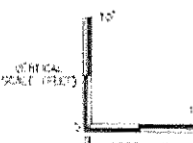


SECTION B-B'

EXPLANATION

TPHc TOTAL PETROLEUM HYDROCARBONS AS DIESEL FUEL BY EPA METHOD 8015M
 RTEK BENZENE, TOLUENE, ETHYLBENZENE AND XYLENES BY EPA METHOD 8021
 MIBC METHYL TERTIARY BUTYL ETHER BY EPA METHOD 8021
 ppm PARTS PER MILLION (MICROGRAMS PER KILOGRAM)
 ppt PARTS PER BILLION (MICROGRAMS PER KILOGRAM)
 ND NOT DETECTED
 J ESTIMATED VALUE

⊗ CONTINUATION SOIL SAMPLE
 [Hatched Box] APPROVED EXCAVATION BACKFILL MATERIAL
 [Dotted Box] (SP; POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES)
 [Outline] LIMITS OF EXCAVATION
 [Box with 'X'] FORMER UNDERGROUND STORAGE TANK LOCATION
 [Shaded Area] APPROXIMATE EXTENT OF SOIL CONTAINING TPHc CONCENTRATIONS EXCEEDING CLEANUP LEVEL OF 1,000 ppm



NOTES:

1. THIS INTERPRETIVE CROSS SECTION IS INTENDED TO PORTRAY GENERAL SUBSURFACE CONDITIONS BASED ON INDICATORS FROM GEOPHYSICAL, GROUNDWATER MONITORING, AND/OR LABORATORY DATA FOR THIS PROJECT. IT IS INTENTED THAT ADDITIONAL DATA MAY BE OBTAINED IN THE FUTURE THAT COULD DIFFER FROM THOSE SHOWN HEREIN.

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR PERMIT	4-12-79	W. W. WILSON
2	REVISED TO SHOW EXCAVATION	4-12-79	W. W. WILSON
3	REVISED TO SHOW SAMPLE LOCATIONS	4-12-79	W. W. WILSON
4	REVISED TO SHOW LIMITS OF EXCAVATION	4-12-79	W. W. WILSON
5	REVISED TO SHOW APPROVED BACKFILL MATERIAL	4-12-79	W. W. WILSON
6	REVISED TO SHOW FORMER UST LOCATION	4-12-79	W. W. WILSON
7	REVISED TO SHOW APPROXIMATE EXTENT OF SOIL CONTAINING TPHc CONCENTRATIONS EXCEEDING CLEANUP LEVEL OF 1,000 ppm	4-12-79	W. W. WILSON

SWDIV



DEM Remediation Services Dept.
 1111 Broadway, 14th Floor, San Francisco, CA 94103-1111

Project No.	4-12-79
Drawn By	W. W. WILSON
Checked By	W. W. WILSON
Approved By	W. W. WILSON
Date	4-12-79
Scale	1" = 10'
Sheet No.	1
Project No.	SW0545
Sheet No.	920903
Fig. No.	Fig. 5-9

SITE R-25128
 GEOPHYSICAL CROSS SECTIONS
 A-A' AND B-B'
 SAN JOSE CENTRAL
 MERCED COUNTY, CALIFORNIA